

**Summary of NOAA and EPA Response to Comments Regarding the Agencies' Proposed Finding that  
Oregon has Failed to Submit a Fully Approvable Coastal Nonpoint Program**

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## I. GENERAL COMMENTS

### A. Proposed Decision

**Comment:** The majority of commenters supported NOAA and EPA’s proposed finding that Oregon has failed to submit a fully approvable coastal nonpoint program under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). In addition to specific concerns addressed in other sections below, commenters noted that 16 years after receiving conditional approval for its coastal nonpoint program, Oregon still does not have an adequate program in place to control polluted runoff to coastal waters and protect designated uses, nor has the state adopted additional management measures for forestry where water quality impairments and degradation of beneficial uses attributable to forestry exist despite implementation of the (g) measures. Commenters also noted that the state failed to follow through on its 2010 commitments to NOAA and EPA—commitments NOAA and EPA used to inform their settlement agreement deadlines with the Northwest Environmental Advocates—to address three remaining conditions on its program related to new development, septic systems, and forestry by March 2013.

While some commenters agreed that Oregon did need to do more to improve water quality, they did not agree with NOAA and EPA’s proposed decision because they opposed withholding federal funding under CZMA Section 306 and CWA Section 319. They felt withholding funding would be counterproductive, as the funding under these two programs help to improve water quality and restore habitat. They argued that withholding funds would likely not result in the policy and programmatic changes NOAA and EPA seek and would negatively impact coastal communities and watershed groups that rely on the funding from NOAA and EPA to address polluted runoff and coastal habitat issues in the state. Furthermore, withholding funding would hurt two state programs and agencies, Oregon’s Coastal Management Program in the Department of Land and Conservation and Development and Oregon’s Nonpoint Source Management Program (in the Department of Environmental Quality) that have very little (if any) influence over the most significant remaining issues (i.e., forestry and agriculture).

A few commenters noted NOAA and EPA should continue to work with Oregon to improve its water quality programs and that the state just needed additional time to meet the CZARA requirements.

Other commenters opposed NOAA and EPA’s proposed finding. They stated Oregon did have adequate programs in place to meet, or in some cases exceed, the CZARA requirements and control polluted runoff. More specific comments are discussed in sections below.

*Source: 1-C, 2-B, 4-A, 5-A, 8-B, 9-A, 13-A, 14-A, 14-C, 15-A, 16-B, 17-A, 19-B, 22-A, 22-C, 23-A, 24-A, 25-A, 25-B, 26-B, 28-A, 30-A, 30-B, 30-H, 31-A, 33-A, 33-B, 34-A, 35-A, 36-A, 36-B, 36-C, 37-B, 37-C, 37-D, 40-A, 41-A, 42-A, 42-B, 43-A, 44-A, 44-B, 46-A, 47-A, 48-B, 49-A, 53-A, 52-A, 54-A, 55-B, 56-C, 57-A, 64-B, 64-D, 66-B, 66-D, 68-B, 68-D*

**Response:** NOAA and EPA appreciate the many comments received in response to the federal agencies proposed decision to find that Oregon has failed to submit an approvable program under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). After carefully considering all comments received and the state’s March 20, 2014, response to the proposed decision, NOAA and EPA continue to find that Oregon has failed to submit an approvable program. As described more fully in the final decision memorandum, , the state has not met the conditions related to \*\*\*\* [add statement of where

Oregon's program falls short] although Oregon has made tremendous progress in addressing many of the original conditions placed on the state's program.

Per the statute, beginning with FY 2015 federal funding, NOAA will withhold 30 percent of funding for Oregon under Section 306 of the Coastal Zone Management Act that supports implementation of the state's coastal management program and EPA will withhold 30 percent of funding for Oregon under Section 319 of the Clean Water Act that supports implementation of the state's nonpoint source management program.

Although some commenters would prefer NOAA and EPA provide Oregon with additional time to develop a fully approvable program and not withhold funding to the state, NOAA and EPA do not have that flexibility based on the statute and the settlement agreement with the Northwest Environmental Advocates. The Northwest Environmental Advocates sued NOAA and EPA in 2009 challenging the agencies' failure to take a final action on the approval (without conditions) or disapproval of Oregon's coastal nonpoint program and failure to withhold funds from Oregon for not having a fully approved program. NOAA and EPA settled the lawsuit in 2010 and agreed make a final decision on the approvability of the program by May 15, 2014 (extended to January 30, 2015 based on the volume of public comments received).

#### **B. State Legislature Has Been Obstructing ODEQ's Ability to Make Changes**

**Comment:** One commenter stated that the Oregon Department of Environmental Quality (DEQ) has been working hard to get the improvements needed to improve water quality and meet all coastal nonpoint program requirements. However the State Legislature has been obstructing ODEQ's progress and is the one that needs to take action.

*Source: 25-C*

**Response:** We commend DEQ, Oregon Department of Land Conservation and Development (DLCD) and other state agencies for all of the changes they have made to improve water quality and work they have done in order to address the remaining conditions and to meet all coastal nonpoint program requirements. NOAA and EPA will continue to work with Oregon to assist in that effort. We hope that Oregon's legislature will take the necessary and appropriate actions to address all of the remaining conditions.

#### **C. Federal and State Governments Have Responsibility to Manage Waters**

**Comment:** One commenter stated that the Federal and State governments have a responsibility to manage waters in the public trust for maximum long-term benefit for current and future generations. They noted this was not being done.

*Source: 22-C*

**Response:** Federal and state governments do have a responsibility to manage public waters for current and future generations. That is why NOAA and EPA are using the authority they have under CZARA to find that Oregon has failed to submit an approvable coastal nonpoint program and withhold funding from the state under Section 306 of the CZMA and Section 319 of the CWA.

## II. FUNDING

### A. Impacts of Withholding Funds

**Comment:** Commenters recognized that withholding funds under Section 306 of the Coastal Zone Management Act (CZMA) and Section 319 of the Clean Water Act (CWA) could negatively impact the state's ability to improve quality and support beneficial programs such as Total Maximum Daily Loads (TMDLs), Oregon Watershed Enhancement Board (OWEB) watershed planning and restoration projects, local land use planning, and the provision of technical assistance to coastal communities to help them address pressing coastal management issues such as coastal hazards, stormwater management, and growth management. A few commenters argued against NOAA and EPA withholding funds from these programs because they felt withholding funding from two programs for addressing polluted runoff and coastal habitat issues in the state would be counterproductive to accomplishing the goals of these programs and unlikely to result in the policy and programmatic changes NOAA and EPA are seeking. Others noted that withholding funding would hurt two state programs and agencies, Oregon's Coastal Management Program in the DLC D and Oregon's Nonpoint Source Management Program in the DEQ, that have very little (if any) influence over the most significant remaining issues (i.e., forestry and agriculture). Some commenters also noted that withholding funds would negatively impact coastal communities and watershed groups that also rely on this funding from NOAA and EPA.

Other commenters supported withholding funds even though they acknowledged it may have some negative impacts initially. They saw withholding funding as the only way to get action in the state to improve water quality and protect designated uses. One commenter also noted that NOAA and EPA's failure to withhold funding sooner allowed Oregon to limp along for over 16 years with inadequate management measures for its coastal nonpoint program while drinking water and other water quality impairments occurred.

*Source: 1-C, 5-A, 8-B, 14-C, 16-B, 17-A, 25-A, 25-B, 25-D, 25-E, 25-F, 33-A, 33-B, 36-A, 36-B, 36-C, 37-B, 37-C, 37-D, 43-A, 48-B, 55-B, 64-B, 66-B, 68-B,*

**Response:** NOAA and EPA recognize that withholding funding under Section 306 of the CZMA and Section 319 of the CWA could make it more difficult for Oregon to maintain the same level of effort on key programs that help improve water quality and protect salmon habitat, such as the state's coastal management, TMDL, and nonpoint source programs. However, the penalty provision in CZARA was designed to provide a financial disincentive to states to encourage them to develop fully approvable coastal nonpoint programs to provide better protection for coastal water quality in a timely manner. The statute directs NOAA and EPA to withhold funding when the agencies find a state has failed to submit an approvable coastal nonpoint program. NOAA and EPA will continue to help Oregon to develop a fully approvable coastal nonpoint program so that the funding reductions from the penalties can be eliminated as soon as possible.

### B. Oregon Stands to Lose \$4 million in Federal Funding

**Comment:** Several commenters stated that if NOAA and EPA's proposed finding that Oregon has failed to submit a fully approvable coastal nonpoint program stands, Oregon would lose \$4 million in federal funding.

Source: 1-C, 14-C, 43-A

**Response:** NOAA and EPA would like to correct this statement. Oregon only stands to lose \$4 million in federal funding if it continues fail to submit an approvable coastal nonpoint program. Based on current appropriations, that would not occur until \*\*\*. Each year, beginning with federal FY 2015, Oregon fails to submit an approvable program, the state will lose 30 percent of the state's allocation under Section 306 of the CZMA and Section 319 of the Clean Water Act. For FY 2015, that is only about \$\*\*\* in federal funding (a loss of \$\*\*\* for \$\*\* for CZMA Section 306 and \$\*\* for CWA Section 319).

### III. AUTHORITIES UNDER THE COASTAL ZONE ACT REAUTHORIZATION AMENDMENTS (CZARA)

#### A. Suitability of Voluntary Approaches Backed By Enforceable Authorities

**Comment:** Several commenters noted that CZARA requires coastal states to have enforceable mechanisms for each management measure. They were not satisfied with the voluntary approaches Oregon was using to address many CZARA management measure requirements. They noted that the voluntary approaches were not being adhered to and that Oregon was not using its back-up authority to enforce and ensure implementation of the CZARA management measures, when needed. A few commenters also noted that Oregon had not described the link between the enforcement agency and implementing agency and the process the agencies will use to take enforcement action when voluntary approaches are not adequate to protect water quality. Another commenter noted that voluntary approaches will not work and that the state needed to adopt approaches that could be enforced directly.

Source: 15-C, 15-D, 16-A, 28-E, 30-O, 46-H, 49-J

**Response:** States must have enforceable policies and mechanisms to implement the CZARA management measures (see Section 306(d)(16) of the Coastal Zone Management Act). As the NOAA and EPA January 1993 *Coastal Nonpoint Pollution Control Program Development and Approval Guidance* states, "these enforceable policies and mechanisms may be state or local regulatory controls, and/or non-regulatory incentive programs combined with state enforcement authority." Therefore, voluntary, incentive-based programs are acceptable approaches for meeting the CZARA management measure requirements as long as the state has demonstrated it has adequate back-up authority to ensure implementation of the CZARA managements, when necessary.

For coastal nonpoint program approval, CZARA requires NOAA and EPA to assess whether or not the state "provides for the implementation" of 6217(g) management measures (Section 6217(b)). In other words, does the state have processes in place that are backed by enforceable policies and mechanisms to implement the 6217(g) management measures? In approving a state's coastal nonpoint program, NOAA and EPA cannot consider how well those processes, including voluntary ones, are working or being enforced. Program implementation and evaluation of the effectiveness of that implementation coastal nonpoint programs are conducted after program approval. Section 6217(c)(2) of CZARA calls on states to implement their approved programs through changes to their nonpoint source management plan, approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act. Therefore,

NOAA and EPA evaluate how well a state is implementing its coastal nonpoint program through assessing the effectiveness of the state's Nonpoint Source Management Program and Coastal Management Program annually as part of the process of providing funding.

In 1998 and 2001, NOAA and EPA issued additional guidance on exactly what states need to do demonstrate they have adequate back up authority for voluntary, incentive-based programs. This includes, as the commenter referenced, a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary. (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990* and *Enforceable Policies and Mechanisms for State Coastal Nonpoint Programs*. Both guidance documents are available at <http://coastalmanagement.noaa.gov/nonpoint/guide.html>.)

Contrary to a few commenters, the federal agencies believe the state has sufficiently demonstrated the link between implementing and enforcing agencies as well as a commitment to use that authority for New Development and OSDs management measures \*\*\*\*\*. However, NOAA and EPA agree with the commenter that the state has not met all the requirements for relying on voluntary programs, backed by enforceable authorities, to address its remaining conditions related to additional management measures for forestry as well as [agriculture]. The rationales for those conditions in the final decision document on Oregon's Coastal Nonpoint Program explain why NOAA and EPA have made those findings.

#### **B. Federal Government Taking Over Oregon's Coastal Nonpoint Program**

**Comment:** One commenter noted that NOAA and EPA have an obligation to step in for Oregon and take over its coastal nonpoint pollution control program since the state lacks the will to address its polluted runoff issues.

*Source: 55-C*

**Response:** Unlike some of the EPA water quality programs under the Clean Water Act, like the National Pollutant Discharge Elimination System (NPDES) Program, CZARA provides for exclusive state and local decision-making regarding the specific land-use practices that will be used to meet the coastal nonpoint program management measures. The act does not provide NOAA or EPA with the authority to take over, or implement, a state's coastal nonpoint program if the state fails to act. The law

#### **C. Oregon Needs More Time to Develop Its Coastal Nonpoint Program**

**Comment:** A few commenters stated NOAA and EPA should give Oregon additional time to develop a fully approvable coastal nonpoint program. They noted that developing a program and addressing the remaining conditions NOAA and EPA placed on the state's program is very challenging and that the state has made significant progress since gaining conditional approval. They also noted that the state is continuing to make additional improvements, such as the initiating rulemaking process to achieve better riparian protection for fish-bearing streams

A few other commenters noted that Oregon has had plenty of time since receiving conditional approval for its coastal nonpoint program in 1998 and that water quality is no better now that it was 16 years ago.

*Source: 14-D, 33-C, 28-F*

**Response:** NOAA and EPA have already provided Oregon sufficient time to develop a fully approvable coastal nonpoint program. The settlement agreement with the Northwest Environmental Advocates and the federal agencies set a deadline for making a final decision of May 15, 2014 (subsequently extended to January 30, 2015, based on the numerous public comments received), regarding whether or not Oregon has failed to submit an approved (without conditions) coastal nonpoint program.

CZARA, passed in 1990, provided all coastal states participating in the National Coastal Zone Management Program 30 months after the date EPA published the final program guidance (January 1993) to submit a coastal nonpoint program for approval. The statute also stated NOAA and EPA shall withhold funding from CZMA Section 306 and CWA Section 319, respectively, beginning as early as 1996 if the agencies found a state had failed to submit an approvable program.

Recognizing the complexities involved in developing a coastal nonpoint program and the time involved to develop programs, backed by enforceable policies, to implement the 56 management measures, NOAA and EPA initially approved all state programs, with conditions, they needed to address. NOAA and EPA also additional guidance memos notes that if NOAA and EPA find the state has failed to submit an approvable programs as early as 1996,

#### **D. CZARA Requires State to Address Issues Outside of Its Control**

**Comment:** One commenter disagreed with the Coastal Nonpoint Program regarding its requirement that states have to meet all CZARA management measures. They noted that some measures, such as onsite sewage disposal systems, are often addressed at the local level, and therefore, outside of the state's jurisdiction.

*Source: 10-B*

**Response:** NOAA and EPA agree that states are required to meet the onsite sewage disposal system (OSDS) management measures even though many of the issues could be addressed at the local level. The CZARA statute requires all coastal states participating in the National Coastal Zone Management Program to develop coastal nonpoint programs that "provide for the implementation, at a minimum, of management measures in conformity with the guidance published under subsection (g)..." (See Section 6217 (b)). The 1993 guidance EPA developed to comply with subsection (g), *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, outlines two management measures related to new and existing onsite sewage disposal systems (OSDS) that states must address.

NOAA and EPA recognize that local governments often play a significant role in managing OSDS. Recognizing this, the federal agencies have accepted a variety of approaches states use to meet these management measures that have relied on direct state-level authority, a mixture of state and local-level authorities, or state-led voluntary approaches backed by enforceable authorities. As described by NOAA and EPA's 1998 conditional approval findings and 2015 decision memorandums, Oregon satisfies the



OSDS management measures through a combination of direct state authorities and arrangement with the Relators' Association to promote voluntary inspections at the time of property transfer.

#### **E. NOAA and EPA are Holding Oregon to a Higher Standard**

**Comment:** One commenter stated NOAA and EPA were holding Oregon to a higher standard than other states. Raising the approval threshold for Oregon compared to other states was unfair to Oregon. NOAA and EPA should focus on helping Oregon meet the previously established minimum standards for other state coastal nonpoint programs rather than requiring Oregon to meet a higher bar.

*Source: 10-A*

**Response:** NOAA and EPA are not holding Oregon to a higher standard than other states. The CZARA statutory requirements and 6217(g) guidance that is the federal agencies used to evaluate Oregon's program are the same that is used to evaluate every other states' program. Oregon, along with Washington and California, did receive conditions placed on their programs requiring the states to develop additional management measures for forestry that went beyond the basic CZARA 6217(g) forestry management measures. This was done in recognition of salmon and the more stringent water quality requirements they required. Even though the three Pacific Northwest states had programs in place to satisfy 6217(g) forestry management measures, impacts to salmon and salmon habitat were still occurring due to forestry so additional management measures for forestry were needed.

Oregon, however, is the only state where NOAA and EPA have been sued over the agencies' ability to conditionally approve a state's coastal nonpoint program. That lawsuit was settled and EPA and NOAA entered into a settlement agreement with the plaintiff which requires NOAA and EPA to meet certain deadlines that do not apply to other states. The settlement agreement requires EPA and NOAA to make a final decision on the approvability of Oregon's program by May 15, 2014 (extended to January 30, 2015, due the number of public comments received).

#### **F. Need to Take a Tailored Approach to NPS Control**

**Comment:** A few commenters were concerned that NOAA and EPA were applying a one-size-fits all approach to addressing nonpoint source pollution in Oregon by requiring the state to meet specific national management measures. They felt that a more tailored approach that considers Oregon's specific circumstances would be more appropriate.

*Source: 8-C, 10-E*

**Response:** By its nature, CZARA gives states great deference to develop programs that are consistent with the broad national 6217(g) management measure requirements yet are tailored to meet the state's specific circumstances. Section 6217 does not provide NOAA or EPA with authority to require states or local governments to take specific actions to address coastal nonpoint source pollution. Rather, NOAA and EPA work with the state to find the best approach for each state yet is consistent with the overarching CZARA requirements.

As required by section 6217 (g), EPA published, *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*. The guidance specifies 56 management measures that form the core requirements of a state's coastal nonpoint program. While the guidance establishes baseline

standards for addressing broad categories and sources of nonpoint source pollutants, there are many different approaches states, like Oregon, can take or have taken to be consistent with the overarching 6217(g) management measure requirements.

NOAA and EPA have suggested various approaches Oregon could take to meet the 6217(g) management measures but the decision regarding the specific land-use practices that the state uses to meet the measures rests with the state. For example, Oregon originally proposed to address the condition on its program about ensuring routine inspections of existing onsite sewage disposal systems with a rule change that would have required inspections at the time of property transfer. When the rule change did not pass, NOAA and EPA worked with the state to come up with a suitable alternative that involved working with the Realtors' Association to develop a voluntary point of sale inspection program that was backed by enforceable authorities. Both of these approaches satisfied the 6217(g) management measure (see decision rationale for additional details).

### **G. Coastal Nonpoint Program Needs to Address Climate Change**

**Comment:** One commenter noted that Oregon's Coastal Nonpoint Program needs to address climate change; water shortages and toxins will become even more pressing issues as the climate continues to change.

*Source: 50-A*

**Response:** Climate change is an important issue facing coastal states and can have an impact on coastal water quality. NOAA and EPA take climate change very seriously and are involved in a number of initiatives to help states and other entities become more resilient to climate change. For example through the National Coastal Zone Management Program NOAA has been providing financial and technical assistance to Oregon to encourage local governments to incorporate hazards and climate change considerations into their local comprehensive plans. Specifically, NOAA and Oregon have been working with local governments to plan for and reduce exposure to climate-related natural hazards in Oregon's coastal zone. Also, through \*\*\* EPA [provide a specific example of how EPA is working with Oregon to be more resilience to climate change?]

However, CZARA, does not have any specific requirements for states to address climate change through their coastal nonpoint programs. When approving state coastal nonpoint programs, NOAA and EPA must make sure each state satisfies the requirements laid out in the 1993 *Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters*, developed pursuant to Section 6217(g). The 1993 guidance only contains a few mentions of climate change in the discussion of several suggested best management practices a state could employ to implement the management measure. The discussion for the new onsite sewage disposal system management measure mentions that the rate of sea level rise should be considered when siting onsite sewage disposal systems and the discussion for the stream bank and shoreline erosion management measure notes that setback regulations should recognize that special features of the streambank or shoreline, may change, providing an example of beaches and wetlands that are expected to migrate landward due to rising water levels as a result of global warming. However, none of these are required elements for a state's coastal nonpoint program.

## IV. GENERAL—WATER QUALITY, MONITORING, AND ENFORCEMENT

### A. Status of Oregon Coastal Water Quality Should Inform NOAA and EPA Decision

**Comment:** Many commenters expressed the need for Oregon to do more to improve coastal water quality and protect designated uses. They believe the fact that many coastal water quality problems in the state still exist demonstrates that Oregon's existing programs to control coastal nonpoint source pollution are inadequate and that the state needs to do more to strengthen its coastal nonpoint program. Specific concerns cited included failure to meet water quality standards, numerous TMDLs for temperature, sediment, and/or toxics, impaired drinking water, and recent federal species listings under the Endangered Species Act for salmon, salmon habitat, amphibians, and wildlife. For example, several commenters cited the recent federal listings for Southern Oregon Northern California Coast coho salmon as illustrative of how salmon populations and habitat have continued to decline, due, in part, to human-related water quality and habitat impairments. Commenters specifically called out activities from timber harvesting, agriculture and urban development as a reason for these impairments. Commenters also stated that Oregon fails to identify land uses causing or threatening water quality and the state ignores technical information available about land uses that consistently cause or contribute to violations of water quality standards in coastal watersheds.

Several other commenters noted that recent improvements in Oregon's coastal water quality and salmon runs demonstrate that the state's coastal nonpoint pollution control program is effective. One commenter stated that Oregon streams are among the cleanest in the country and provide good water for aquaculture. A few other commenters noted the good work and water quality and habitat improvements made by watershed groups, Oregon Watershed Enhancement Board (OWEB), Soil and Water Conservation Districts, and the voluntary efforts the timber industry and farmers (cattlemen) have implemented on their own. For example, one commenter cited an Oregon Department of Fish and Wildlife study that shows many out-migrating and returning salmon to Tillamook State forest land and described how collaborative restoration efforts of federal, state, county and private citizen groups have effectively worked together to improve the Tillamook watershed. Another commenter stated there was too much focus on the need to see water quality improvements; rather, given the increase in population and other development pressures in recent decades, even maintaining water quality levels should be considered a success.

*Source: 1-A, 1-B, 5-B, 8-A, 10-C, 11-A, 14-B, 15-E, 19-B, 19-E, 20-A, 20-D, 22-D, 25-A, 26-A, 28-F, 30-B, 30-I, 30-O, 31-B, 35-A, 35-B, 35-C, 39-A, 42-B, 42-C, 42-I, 43-F, 44-B, 48-C, 56-B, 57-GG, 57-NN, 57-VV, 82-C, 82-E, 83-C, 83-D*

**Response:** NOAA and EPA recognize that the achievements of voluntary programs, such as OWEB and SWCDs, play an important role in addressing nonpoint source management and improving water quality in coastal Oregon. Oregon does have some noteworthy successes, such as returning salmon populations to the Tillamook watershed. However, as other commenters pointed out and the state's recent 303(d) list reflects, the state still grapples with impaired waterbodies that are not achieving water quality standards or supporting designated uses such as domestic water supply (drinking water) and fish and aquatic life (i.e., salmon).

Although NOAA and EPA have found that Oregon does not yet have a fully approvable coastal nonpoint Program and must do more to reduce polluted runoff, specifically related to forestry (see final decision rationale), this finding is not driven by the current status of coastal water quality in Oregon. CZARA does not require states to have clean water throughout their coastal nonpoint program management areas

before receiving full approval for their coastal nonpoint programs. Rather, CZARA employs an adaptive management approach. States, like Oregon, must have processes in place to implement the 6217(g) management measures as well as have processes in place to identify and implement additional management measures, when needed (i.e., when the existing 6217(g) management measures are not sufficient for achieving water quality standards and protecting designated uses (see Section 6217(b)).

The legislative history (floor statement of Rep. Gerry Studds, House sponsor of section 6217) indicates that implementation of 6217(g) management measures is “intentionally divorced from identified water quality problems because of the enormous difficulty of establishing cause and effect linkages between particular land use activities and specific water quality problems.” Therefore, as noted above, when deciding whether or not to fully approve a state’s coastal nonpoint program, NOAA and EPA assess whether or not a state has appropriate management measures in place, not on the current status of the state’s water quality.

## **B. Need Improved Water Quality Monitoring**

*Note: See also specific comments related to Agriculture-Monitoring and Tracking, Pesticides-Monitoring and Tracking, and Forestry-Pesticides.*

**Comment:** Several commenters stated concern about the adequacy of Oregon’s water quality monitoring programs, especially related to monitoring after aerial application of pesticides and herbicides on forest lands. Commenters noted that Oregon does not have monitoring programs in place to adequately assess whether or not pollution controls are achieving their goals and protecting water quality. Therefore, it is difficult for the state to determine if and when additional management measures are needed as CZARA requires.

Commenters suggested several different monitoring approaches Oregon needed to require and implement in order to adequately protect water quality. These included: requiring turbidity monitoring of streams during and after rainstorms and taking enforcement action when excess turbidity is found; requiring recurrent road surface condition monitoring; requiring more frequent inspections of drinking water, especially when pesticide spraying occurs; and improving upon a recently developed strategy for determining agricultural landowners’ compliance with water quality rules.

Several other commenters stated Oregon’s monitoring and tracking programs were adequate and touted the State’s greater focus on water quality monitoring over the past few years.

*Source: 2-A, 30-R, 42-G, 42-H, 46-H, 49-I, 57-BB, 71-??, 84-??.*

**Response:** NOAA and EPA recognize commenters are concerned about the adequacy of Oregon’s water quality monitoring programs and that the existing monitoring efforts are not robust enough to observe potential impacts from pesticide application and other land uses and to determine when and if additional management measures are needed. The federal agencies also recognize Oregon’s efforts over the past few years to improve its water quality monitoring efforts, such as the state’s Enterprise Monitoring Initiative, and strongly encourage the state to make continued improvements on monitoring and tracking of coastal nonpoint source pollution and best management practice implementation within the coastal nonpoint management area.

NOAA and EPA did not propose a decision on the approvability of the overall monitoring and tracking elements of Oregon’s Coastal Nonpoint Program and did not solicit comment on this issue at this time.

The public will have an opportunity to comment on this aspect of Oregon's program at some point in the future before the agencies fully approve Oregon's coastal nonpoint program. (See the appropriate Forestry and Agriculture sections in this document for responses to specific comments related to the monitoring and tracking efforts related to Oregon's forestry and agriculture programs.)

### C. Enforcement

**Comment:** One commenter noted that Oregon fails to systematically address water quality standard violations caused by excess sedimentation.

*Source: 57-UU*

**Response D.4:** CZARA requires state coastal nonpoint programs need to "provide for the implementation" of the 6217(g) management measures (Section 6217(b)). Therefore, when evaluating whether or not the state has satisfied its CZARA requirements, NOAA and EPA do not consider how well a state is implementing or enforcing its laws and programs that comprise its coastal nonpoint program (or whether or not these programs are meeting water quality standards). For coastal nonpoint program approval, NOAA and EPA only consider whether or not a state has programs and processes in place to meet the 6217(g) management measure requirements.

Evaluating how well a state is implementing its approved coastal nonpoint program comes later. Section 6217(c)(2) of CZARA notes that states shall implement their approved programs through changes to its nonpoint source management plan, approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act. Program implementation and evaluation of the effectiveness of that implementation coastal nonpoint programs are conducted after program approval. Section 6217(c)(2) of CZARA calls on states to implement their approved programs through changes to their nonpoint source management plan, approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act.

States are required to update their nonpoint source management plans every 5 years and submit to EPA for approval. Oregon recently drafted an updated plan, provided the public an opportunity to review the draft plan during August 2015 and finalized the plan on \_\_\_\_\_. This plan can be found at \_\_\_\_\_. The key components of the updated plan can be found in EPA's "Nonpoint Source Program and Grants Guidelines for States and Territories" on page 53 (see <http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf>). Annually EPA reviews the progress that each state is making in implementing its nonpoint source (NPS) management program and provides written documentation of this progress. Specifically, prior to approving funding recommendations for the award of section 319 funds, the Regions completes the review covering the prior year to determine the state has made satisfactory progress on implementing its NPS management program. EPA's checklist is designed to document the extent to which each state meets foundational aspects of program progress and CWA section 319 grant management requirements, including those specified in binding section 319 grant guidelines available at [www.epa.gov/nps/319](http://www.epa.gov/nps/319) and can be found in EPA's "Nonpoint Source Program and Grants Guidelines for States and Territories" on page 70 (see <http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf>). [The CZMA calls on NOAA to conduct routine evaluations of state coastal management programs. During these evaluations, NOAA assesses how well states are implementing their approved coastal management programs, administering federal grant funding under the program, and achieving the goals of the National Coastal

Zone Management Program, including “the management of coastal development to improve, safeguard, and restore the quality of coastal waters, and to protect natural resources and existing uses of those waters” (See CZMA Section 303(2)(c)).

Also, as stated in the introductory chapter of the 6217(g) guidance, *Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters*, the legislative history (floor statement of Rep. Gerry Studds, House sponsor of section 6217) acknowledges that the management measures are based on technical and economic achievability rather than achieving particular water quality standards. The legislative history indicates that implementation of management measures was “intentionally divorced from identified water quality problems because of the enormous difficulty of establishing cause and effect linkages between particular land use activities and specific water quality problems.” Therefore, as noted above, under the Coastal Nonpoint Program, NOAA and EPA assess whether or not a state has appropriate management measures in place, not whether the approaches effectively achieve water quality standards.

If, after implementing the technology-based the 6217(g) management measures, water quality impairments are still occurring, CZARA employs an adaptive approach. The Act requires states to provide for the implementation of additional management measures within identified areas to address land uses that are either currently causing water quality impairments or where reasonably foreseeable new or expanding land uses could threaten coastal water quality (Section 6217 (b)(3)).

## V. CRITICAL COASTAL AREAS AND ADDITIONAL MANAGEMENT MEASURES

### A. Process for Identifying Critical Coastal Areas and Additional Management Measures is Not Effective

**Comment:** One commenter states that Oregon’s process for identifying critical coastal areas and the need for additional management measures, which relies largely on the state’s Clean Water Act 303d listing process for impaired waters and TMDL program, is flawed in several ways. Specifically, the commenter believes Oregon’s Clean Water Act 303d listing process is not effective. The state fails to meet the 303d list regulatory requirements to “assemble and evaluate all existing and readily available water quality related data and information to develop the list” and the state does not use nonpoint source assessments to develop its 303d lists. The commenter also states that Oregon ignores a variety of technical information available to help identify land uses that consistently cause or contribute to water quality standard violations. In addition, the commenter noted that Oregon does not use TMDLs to identify critical coastal areas and assess where existing CZARA management measures are not adequate for meeting water quality standards, as required for CZARA approval. The commenter also notes that the associated TMDL water quality management plans do not support an effective coastal nonpoint program. For example, despite the numerous temperature TMDLs that have been developed in Oregon’s coastal watershed, the commenter notes that load allocations have not been used to determine minimum riparian buffer width, height, or density to achieve the load allocation.

*Source: 57-KK, 57-LL, 57-MM, 57-NN, 57-QQ, 57-RR, 57-SS, 57-TT*

**Response:** NOAA and EPA did not propose a decision on the approvability of Oregon’s process for identifying critical coastal areas and additional management measures and did not solicit comment on

this issue at this time. The public will have an opportunity to comment on this aspect of Oregon's program at some point in the future before the agencies fully approve Oregon's coastal nonpoint program.

## **B. NOAA and EPA Lack Authority to Require Additional Management Measures**

**Comment:** A few commenters stated NOAA and EPA do not have the authority to require Oregon to develop additional management measures that go beyond the original management measures in the CZARA guidance. They state that the programmatic guidance for the Coastal Nonpoint Program calls on the state, not NOAA and EPA, to identify additional management measures, if necessary, to achieve and maintain water quality standards. They assert the guidance further states that state is to identify additional management measures only within state-designated critical coastal areas to address state-identified land uses that may cause or contribute to water quality degradation.

Other commenters noted that CZARA requires Oregon to demonstrate that it has additional management measures in place to meet water quality standards and protect designated uses. The commenters noted that Oregon has not met this requirement since water quality standards are still not being met and designated uses are not being protected. They are supportive of placing additional management measure requirements on Oregon's coastal nonpoint program and suggested specific measures or nonpoint source issues the additional measures needed to address (see specific comments below).

*Source: 15-E, 28-E, 30-B, 30-O, 57-CC, 71-E, 71-I, 71-H*

### **Response:**

## **VI. PESTICIDES AND TOXICS—GENERAL**

*Note: NOAA and EPA received a variety of comments related to pesticides. Summaries of the general pesticide comments and the federal agencies' responses are provided here. See Agriculture-Pesticides and Forestry-Pesticides for a full discussion of the comments received related to pesticides.*

### **A. Adequacy of Oregon's Coastal Nonpoint Program to Address Pesticides and Other Toxics**

**Comment:** Several commenters noted that Oregon needs to improve how it addresses nonpoint source pollution caused by toxics, including pesticides, herbicides, and superfund contaminants. Commenters specifically noted they believed there was excessive use of toxic chemicals in agriculture and forestry practices. One commenter was also concerned about superfund contamination impacting shellfish harvests.

Commenters expressed their concerns with the ability of Oregon's existing pesticide management program to protect the quality of water in streams and groundwater as well as protect human health and aquatic species. One commenter supported this statement by citing results from a watershed council herbicide study that found that pesticides used along roadsides, agricultural fields, and forestry operations were all evident in Oregon's waterways. They noted that while applicators may have applied the herbicide correctly, the study demonstrates runoff is still occurring, indicating that the State's rules are ineffective at protecting water quality from herbicide application. Several other commenters also felt the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), coupled with the state's pesticide

rules and its Water Quality Pesticide Management Plan, were insufficient to control polluted runoff from pesticide application to Oregon's coastal waters.

A few commenters also stated that not only do they believe Oregon has weak pesticide laws but compliance with the existing rules is poor. One commenter asserted that evidence suggested that federal label restrictions for Atrazine are not being followed. Other commenters complained about the state's poor record keeping of pesticide application and inadequate notice with spraying would occur near their neighborhoods and homes. In addition, one commenter contended that Oregon's pesticide rules were much weaker compared to neighboring states.

Commenters emphasized the need for greater pesticide protection for all land uses within Oregon's coastal zone, especially for agriculture and forestry practices. In particular, several commenters called out that better controls, including larger buffer requirements, are needed for the aerial application of pesticides and herbicides, especially near streams.

One commenter cited various studies to demonstrate pesticide impacts to human health and the environment from one commonly used herbicide, glyphosate. For example, a few studies in the late 1990s and early 2000s linked exposure to glyphosate to an increased risk of non-Hodgkin lymphoma. Other health effects from exposure to glyphosate described by the commenter included breast cancer, ADD/ADHD, increased risks of late abortion, endocrine disruption, and possible increased risk of multiple myeloma. According to studies from the late 2000s, glyphosate causes altered immune responses in fish, and Roundup, a commonly used glyphosate product, is lethal to amphibians. Other environmental impacts from glyphosate were also described. The commenter contended that these human health and environmental impacts have been attributed to exposure to levels of glyphosate below the EPA set standards. The commenter also stated that studies that show adverse health effects of other formulated glyphosate products.

Other commenters disagreed. They believed Oregon has adequate pesticide controls in place which are consistent with CZARA 6217(g) requirements. Landowners were required to follow the FIFRA label requirements and meet additional state requirements. In addition, the EPA-approved, Oregon Water Quality Pesticide Management Plan provides additional description of the State's approach to pesticide management.

*Source: 2-B, 17-C, 32-A, 38-A, 41-A, 46-H, 54-B, 54-D, 54-F, 54-H, 54-I, 54-M, 54-N, 54-O, 54-Q, 54-R, 54-S, 57-GG, 57-HH, 57-II, 57-ZZ, 71-AH, 71-AI, 71-AJ, 71-AK, 81-B, 83-E, 83-M*

**Response:**

- Brief Statement about our decision(s) regarding pesticides for Ag and Forestry (ref decision rationale for greater detail and our authorities under CZARA).
- Acknowledge concern with pesticide use and encouragement to Oregon to continue to strengthen programs.
- NOAA and EPA will continue to work with Oregon within our authorities, to ensure water quality, human health, and aquatic sps. Protection.



- CZARA does not speak to superfund contaminants. Rather superfund contaminants are more appropriately addressed through the Comprehensive Environmental Response, Compensation, and Liability Act (the Superfund Act).

## **B. Pesticides—Adequacy of Pesticide Monitoring Efforts**

**Comment:** Several commenters noted the need for Oregon to strengthen its pesticide monitoring efforts. They stated that Oregon did not have a program in place to determine if federal label requirements are being followed, nor did it monitor widely and regularly for pesticide runoff. One commenter noted that while unknown and unmonitored pesticide uses are a problem, unknown and unmonitored health and environmental risks from pesticides are also a significant problem.

Commenters discussed various monitoring programs that are needed in Oregon, including programs to: monitor pesticide use and impacts; assess whether pesticide management practices are sufficiently reducing pollution and improving water quality; monitor for pesticides in the air, which eventually deposit onto surface waters and soils; monitor for pesticides in coastal watersheds; monitor for pesticides in surface and drinking waters following an aerial spray event; and track whether federal label laws are being complied with.

One commenter also stated that most pesticide risk assessments are based on old and incomplete data and endpoint evaluations and that these needed to be updated with more current information for a better understanding of the true impact of pesticides and acceptable exposure limits. In addition there was little to no understanding of effects from “inert” ingredients in pesticides. The commenter believed that there needed to be more testing and disclosure of these inert ingredients.

A few commenters objected to NOAA and EPA’s statement in the proposed decision document commending the State’s Water Quality Pesticide Management Plan and new pilot pesticide monitoring study. They did not think these programs should be praised as part of Oregon’s Coastal Nonpoint Program. They did not believe the State’s claim that pesticide monitoring would support an adaptive approach and demonstrate when additional controls are needed. They stated that Oregon conducted very little pesticide monitoring to drive an adaptive approach and that none of the pilot monitoring sites are located in the coastal zone.

*Source: 54-E, 54-F, 54-S, 57-ZZ,*

**Response:**

## **VII. NEW DEVELOPMENT**

**Comment:** Many commenters agreed with NOAA and EPA’s proposed finding that Oregon has failed to fully address CZARA requirements for new development, specifically that the state has not provided a commitment to use its back-up authorities to ensure implementation of the management measure

requirements when needed. However, a few commenters did not believe Oregon had an effective program to control stormwater runoff from new development and meet water quality standards. They noted that the state needed to do more than the voluntary program described. For example, one commenter noted that the TMDL Implementation Guidance must require (not recommend) DMAs to follow NPDES Phase II requirements for small MS4s. Another option that was suggested was that NOAA and EPA should require the state to incorporate the CZARA new development management measures into an existing NPDES General Permit or craft a new permit.

Not all commenters were supportive of new regulatory requirements to address the new development management measure. For example, one commenter preferred that the state use its existing authorities and stormwater permits more effectively rather than place additional requirements on small cities and counties. The commenter noted that small cities and counties are not the main source of impairment and often lack the technical expertise and financial resources to meet the new requirements. They suggested the coverage for the 1200C NPDES general permit could be expanded by decreasing the acreage threshold for the permit or using an approach similar to the 1200OCS permit used to address water quality problems in the Columbia Slough.

*Source: 11-B, 13-B, 15-G, 34-B, 34-C, 34-D, 80-C*

#### **Response E.1:**

## **VII. ONSITE SEWAGE DISPOSAL SYSTEMS**

### **A. Adequacy of Oregon's Programs to Meet CZARA Requirements for OSDS**

**Comment:** Many commenters agreed with NOAA and EPA's proposed finding that Oregon has failed to fully address CZARA requirements for existing onsite sewage disposal systems, specifically ensuring routine inspections. While some commenters were supportive of the state's planned outreach efforts to promote voluntary inspections, they agreed with NOAA and EPA that Oregon does not have a tracking program in place to assess the effectiveness of its voluntary program nor has the state demonstrated a commitment to use its back-up enforcement authority to ensure inspections, when needed.

Other commenters were not supportive of Oregon's voluntary approach at all. They felt the state needed to require routine inspections and have more direct enforcement authorities. They noted Oregon's OSDS management program was not sufficient for meeting water quality standards and that enforcement action was minimal for existing leaking septic systems. One commenter noted that Dunes City passed an OSDS ordinance to require routine inspections because previous voluntary approaches did not work. Another commenter was concerned about several communities (Lane County and the City of Florence) allowing septic systems to be cited near lakes.

*Source: 11-B, 12-B, 13-B, 15-G, 34-B, 34-5, 35-E, 48-A, 48-K*

#### **Response:**

## **B. More Needed to Improve OSDS Management**

**Comment:** A few commenters noted specific actions Oregon needs to take before NOAA and EPA approve the state's programs for meeting the OSDS management measure. Actions include: siting OSDS in locations where they are properly separated from groundwater; restricting system density to reduce nitrate input to groundwater; ensure proper sizing of the system to minimize concentrations of contaminants and prevent hydraulic overloading; requiring mandatory inspections every 3-5 years or at the time of property transfer; requiring mandatory pumping after each inspection whenever needed; establishing a step-by-step program for the state to help homeowners with grants and low-cost loans that need support for pumping or replacing failing systems; and establishing explicit enforcement mechanisms.

*Source: 34-E, 48-J, 78-E*

**Response:**

## **C. Concerned with Sewage Discharge to Waterways During Rain Events**

**Comment:** One commenter noted that some communities, such as Myrtle Point and Powers, discharge sewage during rain events, preventing shellfish harvest.

*Source: 17-B*

**Response:**

# **IX. FORESTRY**

## **A. Impacts of Forestry Industry**

**Comment:** NOAA and EPA received mixed comments on its finding that Oregon failed to submit adequate management measures for forestry. Majority of commenters agreed that existing forest practices do not adequately prevent impacts to water quality or designated beneficial uses (e.g. fish spawning, migration, etc.) and additional management measures are needed. Commenters raised various issues associated with the forest industry. Impacts from clear cutting practices were described as contributing to water quality degradation and landslides. A few commenters discussed their concerns with impacts from logging and clear cutting and provided specific examples of impacts that result from forest roads contributing sediment to streams, landslides from clear cutting, inadequate buffers along streams, and the loss of fish spawning habitat. One commenter pointed out the adverse effects of pesticides on amphibians and crawfish in non-fish bearing streams. While another noted the effects of logging on restoration efforts of the Coho Salmon, citing a NOAA opinion for a potential ESA delisting of Coho Salmon.

*Source: 57-F, 57-I, 63-B, 67-E, 67-F, 67-G, 70-C, 75-F*

**Response:**

## **B. General Effectiveness of Existing Forest Practices and Programs**

**Comment:** Many commenters argued that current land use laws and the Forest Practices Act do not provide sufficient protection of Oregon streams and additional management measures for forest practices are necessary to have an approvable program under CZARA. Some commenters contend that the FPA is inconsistent with water quality standards and CZARA and the Oregon Department of Environmental Quality has failed to use its authority to address these inconsistencies. It was also noted that the lack of political will along with state tax benefits to timber industry contribute to the lack of resources state agencies have to improve degraded water quality. One commenter noted that compliance with forest practices regulations is not equal to compliance with water quality standards, and in most cases, enforcement occurs only after water quality damage has already occurred. Another commenter recommended NOAA and EPA to review additional studies and reports to give the federal agencies a full appreciation for the water quality impacts of industrial forestry and associated road impacts in coastal watershed (See pg. 10-11 of public comment for list of recommended sources <http://coastalmanagement.noaa.gov/nonpoint/oregonDocket/publicComments58ow.pdf>).

Conversely, a few commenters have argued that existing programs regulating forest practices are consistent with CZARA and that no additional management measures are needed. It was contended that the FPA adequately protects Oregon's watersheds and the Oregon CNP should be approved without conditions. It was noted that the FPA already requires BMP monitoring including pesticide use monitoring, and landslides and public safety monitoring. And based on monitoring results, forest practice rules have evolved and improved over time. One commenter argued that both EPA and NOAA have failed to show that Oregon's forest practices rules do not meet water quality and beneficial use objectives; on the contrary, a "large body of science" demonstrates that Oregon forest practices have a "neutral to positive" effect on aquatic life.

*Source: 35-I, 57-D, 57-E, 57-F, 57-G, 57-H, 57-S, 57-V, 57-W, 70-C, 75-E, 75-G, 77-F, 77-G, 79-B, 79-C*

### **Response:**

## **C. Adequacy of Forest Practices Act to Satisfy CZARA Requirements**

**Comment:** One group commented that Oregon's Forest Practices Act "establishes a dynamic program that responds promptly and deliberately to environmental issues as they arise..." The group cited sections of the FPA related to forest practices and water quality. It pointed out that the FPA requires that water resources, including drinking water, be maintained and that BMPs be established as necessary to insure maintenance of water quality standards. The commenter contends that the language of this FPA provision adheres to the CZARA requirement that additional management measures be established to maintain applicable water quality standards. The commenter also noted that the FPA already requires BMP monitoring including pesticide use monitoring, and landslides and public safety monitoring. And based on monitoring results, forest practice rules have evolved and improved over time. The commenter argued that while NOAA and EPA have expressed their concerns about forest roads delivering sediment into streams, they have not cited any sources supporting these concerns.

*Source: 77-F, 77-G, 77-M*

## Response:

### D. Importance of Forestry Riparian Management

**Comment:** Many commenters were generally in agreement about the importance of forestry riparian management for addressing erosion and water quality problems they believed were exasperated by lack of adequate riparian buffers along coastal watersheds. One commenter expressed the concern that “large companies with large land holdings” were conducting “dangerous activities” that impact people, wildlife habitats and water quality in the state. The commenter added that such activities required oversight from laws that limit pollution being released into waterways. Another commenter pointed out that habitat and water quality indicators overlap and contended that there was a need to fully examine how physical habitat and water quality are interconnected. The commenter added that because “streams form a linked network, water quality and stream health is closely associated with the intensity and cumulative extent of forest management activities near streams of all sizes, in all parts of the network”, and noted that “approximately 55% of the 27,000 stream miles examined in Oregon were either severely or moderately impacted by nonpoint source pollution.”

The commenters touted a variety of benefits to riparian buffers. A few commenters emphasized the negative impacts that occur due to clear cutting and not providing sufficient riparian buffers, such as increased soil erosion, and lack of pesticide filtration. For example, one commenter cited degraded lakes within the Sutton, Mercer, Woahink, and Siltcoos watersheds where clear cutting to the shores has occurred. Other commenters discussed the effects of winter blow downs where “strong coastal winds accelerate through the clear cuts and abruptly hit the buffers with great force.” Narrow, inadequate buffers are not able to stand up to these winds, and trees are knocked down, leaving nothing to hold the soil in place which ultimately runoffs and impacts the creeks.

Commenters also pointed out the importance of riparian buffers in maintaining large woody debris (LWD). They stated large wood recruitment is essential to maintain biological and hydrological processes in streams (e.g., sediment retention and transport, habitat formation, substrate for biological activity) and is critical for salmonid populations. A commenter described how in a natural stream/riparian system, large wood is recruited from areas adjacent to streams and upslope, including unstable areas that move down toward streams. Moreover, the commenter noted that large wood was not just needed instream but also adjacent to the stream and discussed the role of Conifers and the importance of regeneration rates of conifers in the future. Another commenter noted that older forests and intact riparian areas, as well as large shifting beaver complexes have contributed to greater amounts of LWD in streams which has helped to maintain floodplains, habitat complexity, hyporheic flow, and hydrologic stability. However, the commenter explained, management of coastal lands has resulted in chronic and persistent disturbance and bare riparian areas along the lower reaches of coastal streams. This has led to low LWD, unstable banks, and high energy channels.

Other commenters explained the importance of riparian buffers for controlling sedimentation into streams. A commenter pointed out that if riparian buffers are not required for non-fish bearing streams (headwaters), those streams become a source of excess sediment to networked fish-bearing channels as sediment is transported downstream, essentially decreasing or eliminating the effectiveness of riparian management zones in maintaining low turbidity at a watershed scale. The commenter also described that erosion and sedimentation contributes to losses in channel depth, the frequency and quality of

pools, and off-channel habitat critical for fish rearing. Another commenter noted the constant need for regular dredging of the port of Brandon and other coastal facilities due to siltation caused by erosional riparian areas.

In addition, commenters stated that increased sediment delivery and lack of LWD recruitment also impacts designated uses, such as salmonids and drinking water. Commenters explained how increased sedimentation contributes to increased levels of fine sediment, increased turbidity that can impair salmonid sight feeding and cause gill damage. A commenter also discussed how increased sediment delivery can even cause increased water temperatures in the absence shade loss. Others pointed out the importance of forest riparian buffers for maintaining healthy drinking water by filtering sediments, pesticides, and other pollutants from the water. One commenter noted that even where narrow buffers exist along river shores (e.g., the Siletz River), there are places where the forest buffer has been eliminated completely and streams that flow into the Siletz have no buffer zone at all.

Finally, a commenter also stated that large stream buffers play an important role in storing additional carbon and reduce greenhouse gas emissions.

*Sources: 15-E-1, 15-F-1, 15-F-2, 28-B-1, 30-K-1, 35-J-1, 42-D-2, 45-AAA, 56-D-1, 56-D-2, 57-BBB, 57-DDD, 57-EEE, 58-B-1, 58-E-1, 58-E-3, 58-E-4, 58-H-2, 58-H-6, 75-I*

**Response:**

## **E. Forestry Riparian Management Accomplishments**

**Comment:** Speaking to the accomplishments of Oregon’s coastal nonpoint program as it relates to forestry-riparian management, commenters emphasized their support for Oregon’s existing rules and programs in place to manage the forest industry and maintain water quality and riparian protections. One commenter pointed out that Oregon’s Department of Forestry works to strengthen forest rules for riparian protection but faces political challenges that require “thoughtful science”. The commenter noted the importance of maintaining the forest industry’s support for water quality protection and acknowledged this process will take longer than Spring 2014.

Another commenter, on behalf of various groups, noted that private landowners, foresters, and loggers all support the Oregon Forest Practices Act and believe application of its rules is high. Another group called attention to Oregon’s fifteen plus years of “superior voluntary riparian watershed enhancement accomplishments” by the forest sector and contended that EPA and NOAA’s restrictions would “stifle these valuable watershed improvements”. Lastly, another group noted how Oregon’s Department of Forestry has been doing good work to improve water quality and riparian habitat.

*Sources: 14-D, 77-AAA, 79-D, 82-B*

**Response:**

## **F. Adequacy of Forestry Riparian Management for Protecting Small, Medium Fish-Bearing Streams and Non Fish-Bearing Streams**

**Comment:** Many commenters expressed the opinion that Oregon's existing riparian management practices and forestry laws were inadequate for protecting small and medium fish-bearing and non-fish bearing streams. When required, buffer requirements are minimal (e.g., 20 feet) and Oregon lacks buffer requirements for non-fish bearing streams altogether. One commenter reasoned that because riparian buffers are not required for non-fish bearing streams, they become a source of sediment to connected fish-bearing channels thus compromising the effectiveness of the overall system of riparian management in maintaining sufficiently low turbidity.

Commenters stated that the Oregon Forest Practices Act and other comparable forest practices have been widely criticized for failing to protect water quality and salmonid habitat (examples provided of such failures related to inadequate shade, poor large wood recruitment, lack of tributary protection, and unstable slopes). They also stated that Oregon's forestry riparian protection standards lagged behind those of their neighboring states, such as Washington and California. Commenters pointed to the National Marine Fisheries Services' determination that the Oregon Forestry Practices Act did not have rules in place to adequately protect coho salmon habitat. Commenters opined that the FPA did not provide for the production and introduction of necessary large woody debris to medium, small, and non-fish bearing streams and any required buffers under the rules were inadequate for preventing significant warming of streams.

A white paper analyzing the proposed O&C Trust and the Conservation and Jobs Act was noted as providing evidence of support for the need of more stringent programs to protect water quality in Oregon's coastal zone. A concern was raised that even where narrow buffer zones exist along river shores there were areas where those buffers were eliminated completely. The claim was also made that the Board of Forestry has not shown any intent to provide riparian protection for non-fish bearing streams, which were believed to make up the majority of coastal stream miles and flow into fish bearing streams.

A commenter discussed how restoring and maintaining productive aquatic habitat did not appear to be a common stated objective of Oregon programs that influence the management and use of riparian areas and it appeared that riparian corridors have been significantly degraded across large portions of the state's landscape. Other comments pointed to the 1999 RipStream study findings as evidence that the existing FPA buffers are not in compliance with water quality standards and the Clean Water Act. They stated that riparian management on private lands has not improved since.

Other comments pointed out other weaknesses in Oregon's existing FPA rules. For example, the rules do not protect non-perennial, or intermittent, streams, which are determined "by the State Forester based on a reasonable expectation that the stream will have summer surface flow after July 15." In addition, the commenter raised issue with the lack of required riparian management for seeps and springs as well.

On the other hand, a couple of commenters believed Oregon's existing Forest Practices Act and rules, combined with its voluntary efforts, were adequate for protecting forestry riparian areas. One commenter stated the Forest Practices Act and rules do provide the minimum requirement for developing large mature trees that can contribute wood debris to streams. They also asserted that

voluntary efforts, such as discretionary placement of additional wood in the stream, help to further create large wood debris habitat that salmon need. In addition, they discussed other new voluntary practices are being implemented well among the forest industry, such as the retention of additional leave trees in near-stream areas, and targeted restoration of high-priority riparian areas that are lacking woody debris.

These commenters cited results from several recent Watershed Research Cooperative (WRC) studies to support their position that Oregon's existing forestry riparian management was adequate. For example, they state that two of the three WRC studies indicate a positive fish response following timber harvesting and that the Hinkle Creek WRC study found that small debris provides shade to non-fish bearing streams.

In addition, a couple of commenters chastised NOAA and EPA for relying on much older studies, such as ODF's 1999 RipStream study and the 2002 ODF and DEQ Sufficiency Analysis, to support the federal agencies' claim that Oregon's needed greater protection of small, medium fish-bearing streams and non-fish bearing streams. They stated NOAA and EPA should have considered newer, more relevant research, such as the WRC studies. In addition, one commenter felt NOAA and EPA misinterpreted the RipStream study findings. They believed NOAA and EPA's description of the study's findings on page 8 in the proposed decision document did not align with the actual conclusions of the report.

One commenter also reflected that the criticism of the existing FPA and rules should be tempered against the evolving science and understanding of forestry riparian management. They site how former thinking that clean wood placement in streams was needed to improve instream fish habitat and increase dissolved oxygen, has now evolved to an understanding that large woody debris is needed to achieve these goals. In addition, the commenter states that while there used to be an emphasis on retaining large conifers along streams, that thinking has now shifted to reflect a new understanding of the benefits of riparian hardwoods as well and the importance of diversity in tree species within the riparian zone.

*Sources: 15-G-2, 28-B-1, 30-K-1, 43-BBB, 55-P, 56-D-2, 56-E-1, 56-E-2, 56-E-3, 57-AAA, 57-BBB, 58-E-2, 58-H-1, 58-H-3, 58-H-4, 58-H-5, 67-D1, 67-D-2, 75-H, 77-H, 77-I, 77-BBB, 77-CCC, 77-DDD, 79-E, 79-G*

## **Response:**

### **G. Greater Protection of Forestry Riparian Protection Needed**

**Comment:** Several commenters stated that Oregon needs to provide greater protection for forestry riparian areas along both fish and non-fish bearing streams. One commenter provided several examples of recommended buffer widths that the state may wish to adopt. For example, they mentioned that NMFS recommends no-cut riparian buffers ranging from 150-300 feet in width to protect salmonids. The larger buffer widths are for fish-bearing streams, while the smaller widths are more suitable for non-fish bearing streams. The commenter also stated the Northwest Forest Plan recommends similar buffer widths (300 foot no-cut buffers along fish-bearing streams and 150 foot no-cut buffers along non-fish bearing streams). The commenters stated that wider riparian buffers would ensure large wood recruitment, improve sediment and pesticide filtration, and provide sufficient tree basal area within the riparian zone to shade streams and protect cold water needed for salmon. As one commenter also



asserted, the larger buffers would also provide greater protection from blow downs and ensure that if a few trees are blown down, enough would remain to still provide a functioning buffer.

In addition to greater protection of forestry riparian areas, commenters stated that riparian restoration was needed. They highlighted the important role large downed trees, or nurse trees, play in forest regeneration.

One commenter did express concern with adopting riparian buffers similar to the Northwest Forest Plan. They stated that when the Bureau of Land Management adopted the plan's buffers, it limited the amount of timber that could be harvested. The new buffer requirements necessitated three landings and two more harvest units to harvest the same amount of timber that used to be done with one landing before. Therefore, as the commenter stated, more restrictive riparian buffers leads to greater ground disturbance.

*Sources: 20-B-1, 30-K-1, 48-I, 55-N, 56-E, 56-E-1, 56-E-2, 57-E-3, 58-E-4*

**Response:**

## **H. Impacts of Strict Forestry Riparian Protection**

**Comment:** A couple of commenters expressed concern about the impacts stricter riparian management would have on forestry operations. One commenter felt requirements for larger riparian buffer widths would only hurt the logging industry and drive up the price of lumber. Another commenter stated that any EPA and NOAA-proposed restrictions would limit the ability of private forest landowners to invest in watershed restoration efforts, including enhancements to forestry riparian areas. They felt additional restrictions would smother the forest sector's cooperative stewardship ethic and long-history of voluntarily adopting good riparian management and other forest stewardship practices.

*Sources: 20-B, 79-D, 79-F*

**Response:**

## **I. Flexibility for Forestry Riparian Management Needed, Including Use of Voluntary, Incentive-Based Approaches**

**Comment:** Rather than relying on strict regulatory approaches to better protect riparian areas on forest land, a few commenters advocated for more flexible, voluntary, and incentive-based approaches. The commenters recognized more could be done to protect riparian buffers, and thus water quality, salmon and other designated uses. However, they felt additional incentive-based approaches, combined with the existing Forest Practices Act rules, would be the best way to provide these additional protections and facilitate long-term wood recruitment and shade to support high-quality salmon habitat. Voluntary practices they recommended included the retention of additional leave trees near fish-bearing streams, the placement of large woody debris in streams, planting trees and other carrying out other activities to restore riparian areas, and thinning riparian forests to levels that promote primary production in streams and the adjacent understory (primary production being important for salmon populations).

*Sources: 75-F, 77-CCC, 79-D, 79-F*

**Response:**

**J. Forestry Landslide Management**

**Comment:** Some commenters acknowledged that landslides caused by logging practices such as clear cutting are a real problem in Oregon and additional management measures are necessary to address these impacts. It was noted that Oregon does not have sufficient programs in place to control non-point pollution from forestry practices, particularly due to logging on private lands.

Others expressed their disagreement with the federal agencies' recent decision and argued that the evidence provided by the federal entities was misleading, only focusing on "landslide density relationships" rather than considering the "total number of landslides triggered during major storms". If consider the latter, one would see that the "potential increases in sediment delivery to public resources from landslides...is proportionally small". In addition, it was argued that EPA has not offered objective evidence that additional management measures are needed to maintain water quality. It was recommended that EPA consider a broader scale view over longer timeframes to evaluate whether water quality and designated uses are impaired. The commenter added that the federal agencies have not produced any evidence that landslides resulting from forest management activities have caused exceedances in water quality or negatively impacted aquatic life.

*Source: 61-A, 63-B, 67-B, 77-J, 77-K, 77-L*

**Response:**

**K. Forestry Road Management**

**Comment:** One group commented that there is no program in place to control non-point pollution sufficiently to meet CZARA and management measures are needed to maintain water quality and protect designated beneficial uses due to logging impacts. Examples of logging roads and associated impacts to watersheds and habitat were noted by various commenters. Speaking to current forest practice rules, another group commented that "generic BMPs" are imposed and are not backed by relevant water quality data and so fail at protecting water quality and beneficial uses. The group added that existing rules for forest roads are vague and prioritize logging over protection of water quality. One argument stated that Oregon's road location rule, which only requires operators to minimize risk to streams rather than requiring them to avoid water quality problems, is not sufficient. Other examples given demonstrating the inadequacies of the current forest practices rules include how they are not designed to eliminate delivery of fine sediment or to ensure that delivery does not impair water quality and they do not require that existing, inactive logging roads or "legacy roads" be brought into compliance with water quality standards.

Another group made the argument that while NOAA and EPA have expressed their concerns about forest roads delivering sediment into streams and have requested that the state enact an inventory and reporting program for forest roads, they have not cited any sources supporting these concerns and have presented no basis for the request. The commenter contends that new rule revisions (2002 – 2003) and success under the Oregon Plan for Salmon and Watersheds were detailed in the State's submission and

are evidence that the Oregon Forest Practices Act is working as it should and the Board of Forestry is committed to implement additional management measures for forestry roads as needed. They also note that salmon stocks are recovering.

*Source: 57-D, 57-I, 57-N, 57-O, 57-P, 57-R, 57-T, 57-U, 67-B, 75-D, 77-M, 77-N, 77-O, 77-P, 77-Q, 77-P, 77-Q*

**Response:**

**L. Forestry Pesticides Management**

**Comment:** Many commenters voiced concerns about pesticide and herbicide use associated with the forest industry in Oregon, especially using aerial spraying as a method of applying these chemicals. Adverse impacts to drinking water sources, designated uses, and habitats were among the list of issues commenters raised. Stories of chemicals used in forest practices found in local streams and in state residents were reported. Some believe that Oregon coastal watersheds are not adequately protected from pesticides and herbicides. A few noted that existing buffers are ineffective including existing no-spray buffers around fish-bearing streams, which are considered to be too small and non-fish bearing streams are not protected at all. One commenter suggested a pesticide-free buffer around certain land uses such as schools. One commenter discussed how certain herbicide chemical properties allow for them to persist in the environment and are eventually carried downstream to fish. It was noted that not enough is known about the interactions of chemicals when mixed. Moreover, it was expressed that additional research is needed to determine if aerial spraying of herbicides in forest industry is a necessary method of application.

Several commenters cited specific studies or personal observations to support their statements. For example, one commenter referenced a report, *Oregon's Industrial Forests and Herbicide Use: A Case Study of Risk to People, Drinking Water and Salmon*, to explain how "private forestry operations in Oregon operate under antiquated and loose regulations, allowing aerial spraying and unmonitored applications of pesticides as compared to their federal forestry operation and border-state counterparts." They listed specific findings from the report including: (1) There are known endocrine disrupting chemicals entering Oregon's drinking water sources and fish-bearing streams; (2) Oregon does not require a no-spray buffer near homes and schools; (3) Aerial herbicide sprays regularly occur directly over headwaters and tributaries of protected salmon streams; (4) Oregon permits pesticides to be sprayed with only the smallest protective buffer of 60 feet from salmon and steelhead streams—a buffer significantly smaller than other Northwest states with similar forest and river ecosystems; (5) Stricter chemical and pesticide rules apply in neighboring states with heavy forestry industries; (6) Under the current administrative rules, the Oregon Forest Practices Act prohibits researchers, doctors and the public from obtaining accurate information about what types and quantities of herbicides are sprayed.

However, other commenters contended that existing water quality monitoring activities for non-fish bearing streams during and after spraying herbicides has shown no "detrimental impacts" and Oregon continues to support monitoring that would identify potential problems if any arise. The commenter added that there have been changes over the years in chemical labeling and how chemicals are applied to forests. The commenter pointed out that pesticide applicators are licensed and, along with landowners, are already subject to stringent regulations and guidelines under the FPA and FIFRA.

*Source: 62-B, 62-C, 69-C, 70-C, 70-D, 70-E, 70-G, 70-J, 72-B, 75-C, 76-A, 76-C, 77-R, 77-S, 77-T, 85-D, 85-E*

**Response:**

**M. Inadequate Forestry Pesticide Monitoring**

**Comment:** In addition to their general concern about pesticide use by the forest industry and inadequate riparian buffers when pesticides are applied, several commenters expressed their concern about the inadequacy of the Oregon's water quality monitoring efforts following aerial application of pesticides and herbicides on forestry lands. One commenter stated Oregon has no program to determine the presence of forestry pesticides in the air and resulting in drift and deposition onto surface waters and soils. Commenters gave many examples of how they believe drinking water, human health, and fish and wildlife have been impaired by aerial spraying.

One commenter noted without effective monitoring protocols, the state lacks data to prove aerial application was a problem and improvements were needed. For example, one commenter stated there was no monitoring of aerial drift even though the Oregon Health Administration said chemicals could drift two to four miles. Another commenter also noted there was little to no coordination between DEQ and ODF on pesticide monitoring. One commenter also questioned NOAA and EPA's praise of Oregon's Water Quality Pesticide Management Plan. They noted that while the state purportedly uses water monitoring data to develop adaptive management approaches, the state actually undertakes very little pesticide monitoring and that there is no evidence the state collects any data in coastal watersheds.

It was pointed out that while NOAA and EPA found state-level frameworks and actions sufficient for addressing pesticide water quality controls, none of the pilot monitoring programs supporting this finding occur in the coastal zone. A commenter also added that the agencies "improperly assume that, should riparian buffer standards for type N streams and monitoring programs within the coastal zone adhere to existing state laws and programs concerning water quality and pesticides, then Oregon's CNPCP would warrant approval." The commenter contended that existing state and federal laws do not sufficiently address a large portion of pesticide application activities and do not collect necessary pesticide application and risk data. Referring to Oregon's Water Quality Pesticide Management Plan, which has a component that relies on monitoring data, a commenter noted that the state does little monitoring of pesticides and there is no indication of data being collected in coastal watersheds.

*Source: 30-R, 42-G, 42-H, 46-H, 49-I, 57-II, 70-F*

**Response:**

**N. Forestry Clear Cuts**

**Comment:** Commenters expressed their concerns with the clear cutting practice associated with the logging industry. They disagreed with the amount of clear cutting that occurs, including the FPA rule, which allows up to 120 acres. The point was made that the rule did not consider cumulative impacts. Commenters discussed the impacts to water quality associated with clear cutting, particularly when combined with a lack of riparian buffers and sprays. In addition, the problem of clear cutting on steep, erosional slopes, which contributes to landslide problems and further impacts water quality. One

commenter argued that clear cutting is not sustainable and Oregon needs to practice sustainable forestry. Commenters provided examples of impacts resulting from clear cutting including extensive clear cutting that has occurred in riparian areas around watersheds, including waterways that provide drinking water, despite having steep slopes and erosive soils; and clear cutting that has occurred in areas with designated spotted owl sites and high risk areas.

*Source: 12-A, 40-A, 42-D, 43-D, 53-F, 75-B, 75-C, 75-D,*

**Response:**

## **X. AGRICULTURE**

### **A. Ability of Oregon's Agricultural Programs to Meet CZARA Requirements**

**Comment:** Some commenters noted that they did not believe Oregon had satisfied the CZARA requirements for Agriculture and the conditions related to the agriculture management measures that NOAA and EPA placed on Oregon's Coastal Nonpoint Program. They noted that Oregon must address impacts caused by polluted runoff from agricultural activities. Various points were made about the inadequacy of the management approaches and programs the state relies on to meet the CZARA requirements (see additional comments related to agriculture below for detailed examples).

Other commenters felt that the State had satisfied the CZARA agriculture management measure requirements and the conditions placed on its program related to agriculture (see additional comments related to agriculture for detailed examples). They stated that finding otherwise would be unreasonable and contrary to CZARA requirements. It would also hold Oregon to a higher standard than other states. Some commenters also contended that if NOAA and EPA find that the State has not submitted an approvable program for agriculture, that decision would punish the agriculture community; they would lose important federal funding that help reduce polluted runoff from agricultural activities.

*Source: 5-B, 13-C, 19-C, 44-F, 47-B, 49-G, 56-J, 60-A, 64-A, 64-C, 65-F, 66-A, 66-C, 66-A, 68-C, 71, 84-B*

**Response:**

**Main Points to Highlight?**

- After careful consideration of all comments, the State's March 2014 submittal, and other information, NOAA and EPA have concluded \_\_\_\_\_.
- State what our decision is and why we feel that way (or just refer to rationale in decision doc if that will provide sufficient explanation).

### **B. Extent of Nonpoint Source Pollution from Agriculture**

**Comment:** Several commenters questioned NOAA and EPA's claim in the proposed decision rationale that nonpoint source problems from agriculture are widespread. Commenters stated that agriculture was not the predominant land use within the coastal nonpoint management area. Two different

commenters provided statistics on the extent of agricultural land within the coastal nonpoint management area to support this claim. While they presented slightly different statistics (i.e., agriculture land represents only five percent of land use in the coastal zone with pasture/hay use the predominant land use versus 25 percent of land within the coastal nonpoint program area is agriculture but less than one percent of those agricultural lands are used for activities other than pasture/hay) they arrived at the same conclusion. Given that agricultural land comprises an small overall land area and that most of these agricultural lands are used for pasture or hay, potential water quality impacts from agriculture are reduced since there is little opportunity for soil disturbance or nutrient loading from traditional row crops. They contended that most ambient water quality monitoring reports indicate “fair to excellent water quality” and monitoring sites with poor conditions are not due to agricultural activities.

The same commenters did not feel that NOAA and EPA supported their statement in the proposed decision document that water quality impacts from agriculture were widespread. They found fault with NOAA and EPA’s sole reliance on NOAA National Marine Fisheries Services’ (NMFS) recent listings for coho salmon and draft recovery plans (both under the Endangered Species Act). One commenter stated that the draft salmon listings and recovery plan findings are based on opinion and anecdotal evidence and are unsupported by scientific fact. Therefore, they requested that NOAA and EPA’s references to the coho salmon listings and recovery plan findings as they relate to agriculture impacts to water quality be removed. Another commenter stated that NMFS’s listings and plans did not support a conclusion that water quality or designated use impairments due to agriculture are “widespread.” For example, the commenter reflected that the NMFS documents do not specify which land use(s) require greater buffers to adequately protect coho salmon.

However, other commenters noted that polluted runoff from agricultural activities was a significant concern and contributed to water quality degradation. They noted that Oregon must address nonpoint source pollution impacts from agriculture. (See also response to “Effectiveness of Oregon’s Agriculture Programs for Achieving Water Quality Standards and Protecting Designated Uses” comment.)

*Source: 13-C, 19C, 64-H, 66-H, 68-H, 70-O, 71-B, 71-F, 71-M, 84-C, 84-G*

## **Response:**

### **Main Points to Highlight?**

- What we believe the science says about the significance of ag runoff/how widespread ag NPS problem is in the coastal mngt area. Cite specific studies to support statements.
- Refute claims about inadequacy of NMFS reports?
- Note that we have revised the ag decision rationale to provide additional support for NOAA and EPA’s statements about the extent of ag pollution.

## **C. Effectiveness of Oregon’s Agriculture Programs to Achieve Water Quality Standards and Protect Designated Uses**

**Comment:** Several commenters expressed concern that the approaches Oregon relies on to meet the CZARA agriculture management measure requirements were not sufficient to achieve water quality standards and protect designated uses. For example, several commenters stated that the Agriculture

Water Quality Management Area (AWQMA) rules were too vague to ensure water quality standards are achieved. Another commenter called out Oregon's pesticide management practices as being inadequate to meet water quality standards. One commenter stated that ODA publicly acknowledged that even 100 percent landowner compliance with the current AWQMA rules was not sufficient for achieving water quality standards. The commenters concluded that it was important for the state to include agriculture management measures that enable the state to achieve and maintain water quality standards.

Commenters provided several examples of why they believe Oregon's agriculture programs are unable to meet water quality standards and designated uses. One commenter mentioned that Tillamook Bay was closed to shellfish harvesting for 100 days of the year due to polluted runoff from dairy farms. Another commenter stated that Oregon's Water Use Basin Program failed to maintain minimum water flows, which resulted in impairments to water quality and habitat needed for sensitive and endangered species.

Several other commenters, however, stated that Oregon has developed water quality standards designed to protect designated uses (including coho salmon and other endangered or threatened fish species) and that Oregon's agriculture programs, including the AWQMA Program, are designed to ensure agriculture activities do not prevent the State from achieving those water quality standards and protecting species. One commenter cited excerpts from the North Coast Basin AWQMA rule that state, among other things: "No person conducting agricultural land management shall cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means (ORS 468B.025(1)(a))." and "No person conducting agricultural land management shall discharge any wastes into the waters of the state if the discharge reduces the quality of such waters below the water quality standards establish." (OAR 603-095-0840)

*Source: 46-H, 57-AA, 57-GG, 57-NN, 65-G, 66-E, 71-N, 78-F, 78-G, 83-G, 84-B*

#### **Response:**

#### **D. Effectiveness of the Agriculture Water Quality Management Area Program and Plans for Meeting the CZARA Management Measures**

**Comment:** Several commenters expressed concern with Oregon's reliance on the Agriculture Water Quality Management Area (AWQMA) Program to meet the CZARA management measures and address polluted runoff. However, other commenters were supportive of the program and thought it did enable the state to meet its CZARA agriculture requirements.

Commenters who believed the AWQMA Program did not satisfy the CZARA requirements were concerned that the AWQMA plans, which include the CZARA management measures for agriculture in their appendices, are voluntary. One comment cited Oregon statute and rules that state: "The rules adopted under this subsection shall constitute the only enforceable aspects of a water quality management plan" (ORS 568.912(1)) and "Area rules are the only enforceable aspect of an AWQMA plan" (OAR 603-090-000(4)). The commenters were concerned that the AWQMA rules, which provide ODA with enforcement authority for the program, do not include specific requirements consistent with the CZARA 6217(g) management measures that adequately protect water quality. They believed the AWQMA Program was not sufficient for meeting CZARA requirements because management measures

must be backed by enforceable authority under CZARA. The CZARA management measures in the appendix of the voluntary plans are not enforceable.

A few commenters who participated in AWQMA planning efforts for several different coastal basins cited personal observations that supported their conclusions that the voluntary AWQMA plans lacked specific requirements to adequately protect water quality. One participant with the Mid-Coast Basin described how the planning team rejected including more specific protections for riparian buffers even though they were aware that water quality problems in the basin, such as temperature increases and bacteria contamination from livestock, were created or being exacerbated because riparian vegetation was inadequate. Another commenter who had experience with the Inland Rogue AWQMA plan stated that what was deemed an inappropriate land use practice was subjective because the plan and rules lacked specific thresholds for what was or was not an inappropriate activity.

One commenter was also concerned that ODA does not have an implementation plan, with interim milestones and timeline, in place to ensure the voluntary actions in the plans occur. Another commenter also called out the State's inability to point to significant achievements of the AWQMA Program to improve agriculture land use practices that have caused or contributed to water quality impairments. They believed that since the AWQMA plans and rules have been in place since 2007, the State should have more to show for the program by now if it was actually achieving its goals to protect and improve water quality.

Several other commenters had a different perspective. They felt that the AWQMA Program does enable Oregon to satisfy the CZARA agriculture management measures and the conditions related to agriculture that NOAA and EPA placed on its coastal nonpoint program. One commenter contended that the AWQMA plans and rules exceed CZARA requirements. The commenters stated the coastal AWQMA plans directly reference the CZARA management measures and that ODA has the authority to require the CZARA management measures and to impose additional measures, if necessary. They believed the AWQMA plans and rules provide sufficient goals, policies, and authorities, to improve water quality within coastal watersheds.

One commenter stated that the AWQMA Program includes many practices that are consistent with (or exceed) the CZARA management measures. For example, the plans and rules ensure animal wastes are placed to avoid impacts to water quality, site capable riparian vegetation is in place to reduce erosion, strict nutrient limits are established for waterways, and livestock access to waterways is limited to protect water quality and streambanks.

A few commenters objected to claims by others that the AWQMA plans and rules do not provide specific practices or requirements, such as set buffer widths. They claimed mandating such specific requirements be included in the plans or rules would be applying a "one-size-fits-all" approach which is contrary to the inherent flexibility CZARA affords. One commenter also stated that neither CZARA nor the 6217(g) guidance prescribes specific agricultural practices through the CZARA management measures.

Some commenters, who included several farmers, described how ODA works with ranchers and farmers to modify, reduce, and remove ineffective agriculture practices. They stated that farmers have worked hard to meet or exceed water quality standards by working with the State to develop AWQMA plans to set watershed goals and prioritize investments to enhance water quality. Farmers noted that they



willingly participated in the AWQMA Program and voluntary programs because they had the understanding that the program and their voluntary efforts would meet all federal and state regulatory requirements for agriculture.

Commenters also noted the success of the state's AWQMA Program and voluntary efforts over the years. For example, one commenter stated between 1998-2012, the Oregon Watershed Enhancement Board (OWEB) contributed nearly \$18 million to support coastal agriculture projects and Soil and Water Conservation Districts and landowners provided an additional \$5 million in-kind support. These efforts restored over 950 linear stream miles and improved agricultural practices that impacted over 2,750 acres of farmland. In addition, the commenter also stated, that landowners voluntarily enrolled thousands of acres of farmland in federal programs designed to improve water quality.

*Source: 55-E, 56-J, 57-CC, 57-EE, 64-C, 64-F, 65-B, 65-C, 65-D, 65-E, 65-F, 66-C, 66-F, 68-C, 68-F, 71-A, 71-B, 71-C, 71-G, 71-K, 71-N, 71-P, 71-Q, 71-R, 72-A, 73-A, 78-H, 78-I, 78-K, 84-D, 84-I, 84-N, 84-O*

#### **Response I.2:**

#### **E. Need for Oregon's Agriculture Programs to Have a Greater Focus on Prevention Rather than Rely on Addressing Water Quality Impairments After They Occur**

**Comment:** A few commenters asserted that the AWQMA Program and plans only focused on areas with known water quality impairments. They felt that the AWQMA Program did not provide sufficient protection of more pristine areas to prevent them from becoming degraded. They stated by focusing on impairment rather than protection, ODA is allowing polluting practices to occur for many years until water quality becomes degraded and is documented through a TMDL. Commenters were also concerned that the AWQMA plans do not require restoration, especially pertaining to riparian buffers surrounding former agricultural sites. *(See also discussion under Agriculture-Buffer and Agriculture-Legacy Issues comments.)*

On the contrary, a few other commenters disagreed with NOAA and EPA's statement in the proposed decision rationale that AWQMA plans focused primarily on impaired areas. They stated that landowners are generally expected to protect water quality, not just impaired waters. They believed that ODA implements controls through the AWQMA Program to address sources of existing impairments as well as prevent polluted runoff elsewhere. One commenter provided a specific example of the North Coast Basin rules (OAR 603-095-0840) to illustrate how the standards address impaired areas as well as provide protection and restoration benefits. Another commenter also felt that ODA was coordinating well with DEQ to ensure continued integrity of the AWQMA Program and plans and ensure that landowners have the tools and adaptive approach to address polluted runoff.

*Source: 46-H, 55-F, 80-I, 84-A, 84-D, 84-M, 84-P*

#### **Response:**

## **F. Effectiveness of Oregon Department of Agriculture's Enforcement of Agriculture Programs**

**Comment:** Several commenters stated they were concerned with ODA's lack of enforcement of its AWQMA rules and other agricultural rules. Other commenters did not believe there was an enforcement problem. They argued that CZARA does not require states to take specific enforcement action to receive approval. Rather, states only need to have management measures in place, backed by enforcement authority, which they believed Oregon has done.

Commenters that were concerned about enforcement of Oregon's agriculture programs believed Oregon's complaint-driven enforcement approach was not sufficient and that the state was not using its enforcement authorities when voluntary agriculture approaches fail to protect water quality. For example, one commenter, who is an agricultural landowner and a member of an AWQMA local advisory committee, discussed how the committee was informed that the AWQMA plan would be complaint driven and compliance was voluntary. The commenter questioned the effectiveness of this approach for protecting water quality and designated uses when ODA only issued three fines over the last eleven years.

One commenter felt ODA worked to protect the agriculture industry more than implement the authorities it has to protect water quality. As a result, enforcement was only taken for very egregious cases and even then, it proceeded slowly. Another commenter also stated how difficult it could be to get ODA to take action on a complaint since only signed complaints actually triggered an investigation. Another commenter asserted that polluted runoff from agriculture was difficult to control because most agricultural activities were exempted from the same Clean Water Act standards. Over all, these commenters believed ODA's lax enforcement has allowed agriculture activities to continue to cause and contribute to water quality and designated use impairments.

In addition, one commenter also was concerned that ODA lacks an implementation plan to ensure that voluntary implementation of the AWQMA plans and other voluntary efforts occur. They noted that the implementation plan should include a proactive approach to enforcement (i.e., not rely entirely on a complaint-driven approach) and an enforcement response plan to ensure proper enforcement procedures and corrective actions are triggered when voluntary agricultural efforts are not being implemented or when voluntary approaches are not successfully protecting water quality.

Other commenters provided an opposing view. They argued that most agricultural landowners comply with existing water quality management rules and meet relevant CZARA requirements. They asserted that Oregon has a process in place to effectively address noncompliance issues and that ODA has the ability to enforce the AWQMA program and ensure compliance with water quality requirements.

They refute claims by others that few ODA enforcement actions over the years demonstrate that ODA does not have the ability and/or will to enforce the AWQMA program and ensure water quality is protected. On the contrary, the commenters noted that when a problem is identified, ODA first works closely with the noncompliant landowner to make necessary land use changes voluntarily before turning to enforcement. Therefore, they explained that most issues are corrected before a formal enforcement action is needed. Commenters also highlighted the existing review and monitoring processes ODA has enacted to track program "implementation and effectiveness". (See also discussion for "Agriculture-Monitoring and Tracking" comment.)

As noted above, they also contended that while CZARA requires the State and its agencies to have enforcement authority for the CZARA management measures. One commenter stated that CZARA does not require states to take a certain number of enforcement actions or meet a specific enforcement threshold. They believe that not only does ODA have suitable enforcement authority but the state's July 2013 coastal nonpoint program submission, which provided examples of several agriculture enforcement actions, demonstrates that ODA has used its authority to enforce the AWQMA rules, where necessary and appropriate.

*Source: 41-C, 46-H, 53-E, 54-K, 55-I, 55-D, 56-J, 56-K, 78-J, 80-F*

**Response:**

**G. Inadequacy of Oregon Water Resources Department's (OWRD) Water Use Basin Program for Meeting Irrigation Management Measure**

**Comment:** One group commented that the Oregon Water Resources Department's (OWRD's) Water Use Basin Program is inadequate for meeting CZARA requirements for agriculture. They suggested that NOAA and EPA were incorrect when finding that OWRD's Water Use Basin Program supports the irrigation measure and reiterated that Oregon's Basin Programs do not ensure that water quality and habitat for sensitive and endangered species will not be impaired. They urged EPA and NOAA to look closely at the deficiencies of the Basin Programs before attributing any water quality or fish habitat protection value to them as a measure in support of Oregon's agricultural conditions. They added that Oregon's rules provide no assurance that water use will be adequately limited to maintain minimum flows and that the Basin Programs fail, in practice, to protect minimum perennial streamflows and instream rights held by OWRD for the protection of aquatic wildlife and water quality. They concluded that EPA should disapprove Oregon's agricultural measures and acknowledged the lack of protection offered by Oregon's Water Use Basin Programs for preservation of aquatic life and designated uses in the agencies' final determination.

*Source: 65-B, 65-C, 65-D, 65-E, 65-F, 65-G*

**Response:**

**H. Agriculture Riparian Buffers**

**Comment:** Various commenters noted the importance of, and need for, adequate agricultural riparian buffers along both fish and non-fish bearing streams. They stated the buffers were important to protect water quality, including cold water temperatures needed for the recovery and health of native salmon. The commenters felt that Oregon currently lacks appropriate riparian management practices for agriculture lands to help meet water quality standards and to protect coho salmon, amphibians, and drinking water. In addition, a commenter pointed out that ODA's remote sensing monitoring of riparian areas has shown little improvements in buffers despite implementation of the AWQMA Program and other agriculture programs.

Several commenters provided specific examples of Oregon's poor riparian buffer management. For example, several commenter contended that management measures in Oregon's agricultural plans are deficient to provide protection of stream banks, bank stability, and the destruction of riparian areas by livestock. They explained that stream banks are key to protecting water bodies from elevated sediment delivery that affects levels of turbidity and fine sediment in streams and eroding stream banks contribute to temperature increases, reduce large woody debris to streams, which is critical to salmonid recovery, and contribute to nutrient and pesticide delivery from upslope agricultural activities.

Another commenter spoke about their experience serving as an advisory member to the Mid-Coast Basin AWQMA Advisory Committee during its local area planning in 2009. They explained that when specific buffer proposals were presented to the committee, "All of the specific proposals for riparian protection were rejected by the committee, despite their knowledge of specific water quality problems in the basin created or exacerbated by inadequate riparian vegetation, including stream temperature problems and bacterial contamination from livestock."

A few commenters also discussed how the AWQMA rules do not require active restoration of suitable riparian vegetation. Rather the rules only prohibit agricultural activities from preventing the natural re-establishment of "site capable" riparian vegetation that often results in the establishment of invasive species, like blackberries, along the riparian zone that do not provide the same water quality protection and habitat value as native vegetation.

However, other commenters stated Oregon's current riparian management practices were sufficient for meeting CZARA requirements. Commenters asserted the AWQMA rule did provide for protection of riparian areas and stated that if a violation occurred, i.e. agricultural activities inhibit establishment of riparian vegetation, the livestock would have to be removed or managed appropriately. A commenter provided an example of several North Coast Basin AWQMA rule requirements, such agriculture management activities must be conducted in a way to maintains stream bank integrity through 25-year storm events and minimize the degradation of established native vegetation while allowing for the presence of nonnative vegetation.

The commenter refuted others' claims that the "site capable" vegetation that the rules required was not effective at protecting water quality. They asserted that "site capable" vegetation plays an important role at filtering pesticides from runoff before it enters surface waters. Commenters also pointed out that farmers and ranchers implemented many practices to protect and restore riparian vegetation such as installed miles of piping for livestock watering, and planted and fenced many miles of stream banks. In addition, commenters stated that there is no requirement in CZARA or Section 6217(g) requiring specific riparian buffers on agricultural lands and that NOAA and EPA provided no concrete evidence in their proposed decision document to demonstrate why Oregon needed to improve its management of agriculture riparian buffers to meet CZARA requirements. One commenter did not believe the NMFS reports NOAA and EPA cited in the proposed decision document specified that agriculture land use as a reason better riparian buffers were needed to protect coho salmon.

*Source: 15-H, 44-F, 49-G, 55-E, 55-H, 57-SS, 57-XX, 57-YY, 57-ZZ, 71-H, 71-R, 71-W, 71-AI, 71-AJ, 72-A, 78-G, 78-F, 81-A, 83-E, 83-F, 83-L, 84-G, 84-O*

**Response:**

## I. Agriculture Pesticide Management

*Note: Comments specifically related to pesticides and agriculture are summarized and responded to here. However, NOAA and EPA received general comments on pesticide management as well as specific pesticides related to forestry. Please see Pesticides-General and Forestry-Pesticides for a full discussion of the comments received related to pesticides.*

**Comment:** Commenters expressed concerns with the amount of pesticide application and the lack of management measures in place to address agricultural pesticide use in Oregon. They stated inappropriate pesticide use and controls impacted both human and environmental health. Commenters concluded that Oregon's management measures for pesticides are not adequate to meet water quality standards or support designated uses and additional management measures to address pesticides are needed. Commenters asserted that Oregon needs to improve upon both its application restrictions, providing greater controls on spraying in coastal watersheds, and to improve its protections for all stream classes.

Commenters provided specific examples to support their belief that agriculture pesticide management was inadequate. For example, members of AWQMA local advisory committees relayed that the committees were advised to not even consider pesticides as a pollutant. Therefore, they questioned if the AWQMA Program is sufficient to meet the CZARA 6217(g) management measure requirements. Another commenter referred to an herbicide monitoring study that found that polluted runoff resulted from herbicide applications on agricultural lands, as well as other sources. In addition, other commenters stated that Oregon does not have sufficient programs in place to monitor pesticide use and impacts. They argued that unknown and unmonitored uses, along with unmonitored health and environmental risks associated with pesticides contribute to the inadequacy of Oregon's program. While another commenter contended that because most risk assessments for pesticides are based on old and incomplete data and endpoint evaluations, pesticide management measures should require re-evaluations of endpoints and health and environment impacts. In addition, they believed that risk assessments should also include testing of inert ingredients found in pesticide products.

One commenter also stated that NOAA and EPA's rationale for agriculture in the proposed decision document does not make any findings about the adequacy of Oregon's program to protect water quality and designated uses from pesticides applied to agricultural lands.

However, not all commenters believed Oregon's agriculture pesticide management program was inadequate. Other commenters stated that Oregon does have appropriate management practices and rules in place. A commenter pointed out that Oregon law already encompasses all 6217(g) requirements for pesticide management. All landowners are required to follow pesticide label requirements under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") and follow ODA's pesticide rules. These rules, coupled with the state's Pesticide Stewardship Program, CAFO, and AWQMA Programs allow the State to address any agricultural pesticide issues. In addition, a commenter mentioned that the AWQMA Program's site capable vegetation requirement for riparian areas filters pesticides from runoff before they enter waterways. Also, because applying pesticides costs money, farmers have an economic incentive to use them judiciously and keep pesticides where they are applied.

*Source: 28-D, 38-A, 46-H, 54-B, 54-D, 54-G, 54-H, 54-L, 54-M, 54-N, 54-O, 54-P, 54-Q, 54-R, 54-S, 57-GG, 57-HH, 58-G, 59-A, 71-AH, 71-AI, 71-AJ, 71-AK, 72-A, 81-B, 83-A, 83-E, 83-M*

**Response:**

**I. Combined Animal Feeding Operations**

**Comment:** A few commenters expressed concerns with Oregon's track record at regulating livestock practices. They suggested that Oregon does not even have agriculture management measures in place to adequately regulate combined animal feeding operations (CAFOs). One commenter suggested additional agriculture management measures were needed to improve permitting, monitoring, and relocation of CAFOs.

One commenter pointed out that enforcement of CAFO and other livestock management measures is problematic in Oregon. Inadequate enforcement contributes to degraded water quality. For example, commenters referenced many examples of actual water pollution from livestock, including fecal waste from cows floating in waterways. They described instances where complaints against CAFOs have been submitted repeatedly to ODA but they received no response or resolution to their complaints.

On the other hand, other commenters explained that Oregon's existing requirements relating to managing CAFOs are adequate at maintaining water quality and disagreed that additional management measures are needed. They stated that ODA's rules require landowners to evaluate fertilizer efficiency, assess the layout of their farms and storage facilities, locate potential areas where runoff could contact nutrient carrying substances and relocate or avoid placing storage there.

In addition, they stated that CAFOs are subject to state-wide NPDES permits and are therefore exempt from 6217(g). Moreover, they contended that landowners still go beyond what is required in the 6217(g) CAFO management measures by ensuring there is no discharge to water; runoff is stored and covered; and waste and runoff nutrient levels, temperature, amount of time stored, and time and quantity of land application of manure at agronomic rates are measured and monitored.

*Source: 15-F, 15-H, 60-C, 71-Y, 71-Z, 71-AE, 81-B*

**Response:**

**J. Agriculture Grazing Management**

**Comment:** A few commenters provided comments specifically on the adequacy of Oregon's Coastal Nonpoint Program in addressing the 6217(g) grazing management measure. Several commenters believed the 6217(g) management measures, themselves, were flawed and did not provide adequate protection of water quality. They stated that as written, the grazing management measure allows for broad interpretation that can result in the adoption of ineffective grazing management approaches that do not protect or restore riparian vegetation and do not provide stream shading, as they believed was the case in Oregon. For example, they did not believe the 6217(g) management measure requirement to provide salt and water for livestock away from riparian zones was effective. In addition, the commenter criticized the 6217(g) measure for not requiring a halt to grazing in riparian areas during the summer.

However, other commenters supported Oregon's grazing practices. They felt the AWQMA Program is consistent with the 6217(g) grazing management measure and protects stream banks and water sources from grazing activities. They point out that AWQMA rules limit the amount of time livestock have access

to waterways. In addition, the rules do not allow agricultural activities, including grazing, to inhibit the growth of site capable of riparian vegetation. If there a violation of this restriction, livestock would need to be removed or managed more appropriately.

*Source: 57-YY, 71-AG, 71-AH, 71-AI*

**Response:**

**K. Need for Additional Management Measures for Agriculture**

**Comment:** Multiple commenters noted that Oregon needed to implement additional management measures for agriculture to meet water quality standards and to protect designated uses. One commenter specifically asserted that the existing agriculture management measures do not protect waterbodies from temperature pollution. They stated that temperature pollution is the most pervasive water quality problem in coastal lowland streams and that elevated temperatures can also impact salmonid productivity. They concluded that it is very likely agriculture activities are contributing to temperature standard violations because for most TMDLs, the allowable temperature increases for nonpoint source pollutants is zero. They stated that none of the AWQMA rules for Oregon coastal watersheds, incorporate additional management measures needed to meet the zero load allocations established in the temperature TMDLs.

Commenters suggested specific additional management measures to protect water quality. For example, to address temperature pollution, several comments reflected that minimum riparian buffer widths need to be established. One commenter stated that published literature suggested that the minimum width should be no less than 100 feet (30 meters) and that greater than 100 foot buffers may be needed in certain areas, such as low gradient meandering channels that are adjacent to designated critical habitat for listed species. Another commenter believed that specific height and density requirements also needed to be established for riparian vegetated buffers.

Other additional management measures that commenters identified included: adopting better pesticide management; fencing streams and riparian areas to reduce impacts by livestock; improving permitting, monitoring and relocation of CAFOs; and adopting regulatory provisions to promote the establishment of riparian vegetation in critical habitat areas and the reintroduction of beaver in suitable locations.

On the other hand, several other commenters asserted that additional management measures for agriculture were not needed. The commenters noted that EPA and NOAA have not provided specific data or information that would support the need for additional management measures. They also noted that CZARA does not require states to implement specific practices, such as specific requirements for agricultural riparian buffers or the restoration of lands to pre-agricultural uses.

In addition, they assert that CZARA does not give NOAA and EPA the authority to place specific additional management measure requirements on a state's program. Rather, they state that the CZARA guidance notes that it is the state's responsibility to identify when, where, and what additional management measures are needed. (See discussion under General-Additional Management Measures for response to this specific comment).

*Source: 15-H, 23-B, 44-C, 44-F, 47-B, 56-M, 57-CC, 57-EE, 57-GG, 57-XX, 60-A, 60-E, 64-E, 66-E, 68-E, 71-E, 71-H, 71-I, 84-I*

#### **K. Economic Achievability of Agriculture Management Measures**

**Comment:** A few commenters emphasized that CZARA requires that all management measures must be “economically achievable” (Section 6217(g)(5)). Therefore they asserted that it would be inconsistent with CZARA to require landowners to implement management measures that are not “economically achievable.” They stated that Oregon’s AWQMA Program is rooted in implementing economically achievable agriculture practices, consistent with CZARA statutory requirements. On a related note, another commenter also stated that the more voluntary-based approaches, backed by enforceable authorities, Oregon employs to support implementation of its 6217(g) agriculture management measures are more cost-effective because they allow the landowner the flexibility to select the right best management practice for his or her specific site conditions.

*Sources: 64-E, 64-I, 66-E, 66-I, 68-E, 68-I, 71-H, 84-L*

#### **Response:**

#### **L. Addressing Agriculture Legacy Issues**

**Comment:** A few commenters expressed their concern about legacy agriculture issues, such as where riparian vegetation may have regrown on former agricultural land but is comprised largely of invasive species (i.e., blackberry brambles) and does not provide sufficient protection of stream water quality or create quality habitat. They criticized the AWQMA Program as not doing enough to address legacy issues. They stated that the AWQMA Program does not require active restoration--only removal of current practices that impair restoration. The commenter contended that this creates a gap that must be addressed if Oregon is going to meet its water quality standards. They believed that Oregon needed to adopt additional management measure requirements to address this legacy issue.

Another commenter believed ODA has the authority needed to take action against legacy issues, they did not believe the agency had the political will to do so.

Several other commenters opposed the statement NOAA and EPA made in the proposed decision findings that AWQMA planning and enforcement does not address “legacy” issues created by agriculture activities that are no longer occurring. They stated that neither CZARA nor the 6217(g) guidance define legacy issues or require that state coastal nonpoint programs to address legacy issues. They asserted that nothing within CZARA indicated Congress ever intended for states to consider “legacy” issues through their coastal nonpoint programs.

They stated that even though there is no CZARA requirement to address legacy agriculture issues, Oregon does have a process in place to identify opportunities to enhance and restore watersheds, including address “legacy” agriculture issues. They assert state addresses these issues through the Oregon Plan for Salmon and Watersheds, the Oregon Aquatic Habitat Restoration and Enhancement Guide, the Oregon Watershed Enhancement Board riparian restoration projects, AWQMA plans, and many other federal, public and private partnerships. The still invests money to address these issues. The



commenter states these programs are successful due to the voluntary efforts of many Oregon agriculture landowners.

Another group contended that NOAA and EPA contradicted themselves in regard to legacy agriculture issues in the proposed decision document. They noted the federal agencies made a finding that legacy effects were not addressed through existing regulatory tools but then concluded that agriculture plans were a regulatory mechanism to address past actions that are the primary cause of eroding stream banks.

*Source: 15-H, 44-F, 55-I, 57-X, 71-T, 80-I, 84-J, 84-K*

**Response:**

**M. Effectiveness of Existing Monitoring and Tracking Programs for Agriculture**

**Comment:** Several commenters expressed their concern with Oregon's existing monitoring and tracking efforts to evaluate the effectiveness of its agriculture programs. They did not believe they were sufficient to understand how well existing management approaches are being implemented, how effective those approaches are at protecting and restoring water quality, and when adaptive approaches are needed. A few commenters did acknowledge that ODA's new strategy for more targeted water quality monitoring is a step forward, but they also believed a more robust monitoring and tracking program was needed for agriculture. One commenter asserted that a State independent science team found ODA's proposed monitoring plan lacked detail and focus and lacked an understanding of basic monitoring.

Several commenters specifically stated that ODA does not effectively track implementation and effectiveness of AWQMA plans. A commenter suggested that Oregon needed to include an overall compliance strategy to ensure that AWQMA plans and rules are adequately implemented to meet TMDL load allocations and water quality standards. They added that there must be a policy and proactive process to assess AWQMA plan and rule implementation and for taking appropriate enforcement action when violations occur.

Another commenter stated there was a significant gap in the existing science to understand the effectiveness of Oregon's agricultural practices in protecting water quality and designated uses. They noted that the State cannot move forward with stronger agriculture regulations without first having a good understanding of how its existing programs are falling short and what improvements are needed to ensure water quality standards are being met.

On the other hand, other commenters believed the State's existing monitoring and tracking efforts were effective at assessing implementation of agriculture practices. Specifically they noted that biennial reviews of the AWQMA plans, with about 18 reviews done each year, provide a way to track plan implementation. They also highlighted the State's efforts to develop a more formalized evaluation processes through the Strategic Implementation Areas and Focus Areas process to target priority areas and issues. They also stated the State's new Enterprise Monitoring Initiative, which began in 2012,

monitors waterways passing through agriculture lands and can be used to inform the effectiveness of the AWQMA program.

In addition, a commenter asserted that most ambient water quality monitoring in the coastal region reported fair to excellent water quality and sites with poor conditions were not due to agriculture activities.

*Source: 46-H, 49-I, 53-E, 53-H, 54-R, 55-G, 55-H, 57-11, 70-B, 70-F, 70-K, 70-L, 71-O, 71-S, 71-Z, 72-A, 73-A, 78-H, 79-I, 80-F, 80-G*

#### **Response I.9**

### **XI. HYDROMODIFICATION**

**Comment:** A couple of commenters discussed the negative impacts of hydromodification, noting the effects of dams on water quality and habitat and impacts from channel modification. They declared that Oregon has failed to control polluted runoff from eroding stream banks and shorelines and it does not have programs in place to protect and restore channel conditions from modification.

*Source: 46-H, 49-F*

#### **Response:**

### **XII. WETLANDS**

**Comment:** One commenter noted that Oregon does not have programs in place to protect and restore riparian areas needed to maintain cool stream temperatures and habitat or to protect and restore wetlands.

*Source: 49-F*

#### **Response:**

### **OTHER COMMENTS—NOT RESPONSIVE?**

#### **The Public Comment Period**

**Comment:** One commenter questioned why NOAA and EPA requested public comment on their proposed decision. They noted public comment was needed as long as the federal agencies' decision and analysis is based on established criteria and valid science which they believed to be the case.

*Source: 15-B*

#### **Response:**

**Importance of Beavers**

**Comment:** One commenter expressed their concern over diminishing beaver because they are being trapped and hunted out. They note that beavers play an important role in maintain natural stream channels, wetlands, and complex floodplains.

*Source: 44-G*

**Response:**

**Proposed Decision Exceeds NOAA and EPA's Authority**

**Comment:** One commenter noted that the Federal Government places too many regulations on the states, private property owners, and individuals and that NOAA and EPA exceeded the limits defined by the U.S Constitution. The commenter suggested that Congress should remove the budgets for NOAA and EPA and return those funds back to the state.

*Source: 29-A*

**Response:**

**Summary of NOAA and EPA Response to Comments Regarding the Agencies' Proposed Finding that  
Oregon has Failed to Submit a Fully Approvable Coastal Nonpoint Program**

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Funding-**Allison**  
Authorities-**Allison**  
General-WQ, Monitoring, Enf-**Allison**  
CCA & Add MM-**Allison**  
Pesticides and Toxics-General-**Jenny & Co.**  
New Development-**Don**  
OSDS-**Don**  
Forestry  
- Impacts of Forestry Industry--??  
- General Effectiveness--??  
- Adequacy to Meet CZARA--??  
- Forestry Riparian-**Alan & Co.**  
- Forestry Landslides-**Chris & Co.**  
- Forestry Roads-**Chris & Co.**  
- Forestry Pesticides-**Jenny & Co.**  
- Forestry Monitoring-??  
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## I. GENERAL COMMENTS

### A. Proposed Decision

**Comment:** The majority of commenters supported NOAA and EPA's proposed finding that Oregon has failed to submit a fully approvable coastal nonpoint program under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). In addition to specific concerns addressed in other sections below, commenters noted that 16 years after receiving conditional approval for its coastal nonpoint program, Oregon still does not have an adequate program in place to control polluted runoff to coastal waters and protect designated uses, nor has the state adopted additional management measures for forestry where water quality impairments and degradation of beneficial uses attributable to forestry exist despite implementation of the (g) measures. Commenters also noted that the state failed to follow through on its 2010 commitments to NOAA and EPA—commitments NOAA and EPA used to inform their settlement agreement deadlines with the Northwest Environmental Advocates—to address three remaining conditions on its program related to new development, septic systems, and forestry by March 2013.

**Comment [CJ2]:** May want to include background statement that provides background/history, summarizes our decision (including withholding of funds), number of comments, range of organizations/folks that provided comments etc. before beginning to respond to all of the comments. An example is [http://www.epa.gov/region10/pdf/water/303d/oregon/EPA\\_Response\\_to\\_Comments\\_Final.pdf](http://www.epa.gov/region10/pdf/water/303d/oregon/EPA_Response_to_Comments_Final.pdf) where I took the lead several years ago (similar to this project in which so many folks were involved at all levels and including attorneys since NWEA too had strong interest).

**Comment [CJ3]:** I think this may be confusing to the average reader. May need to explain "g" measures.

**Comment [CJ4]:** Not sure where this date comes from.

While some commenters agreed that Oregon did need to do more to improve water quality, they did not agree with NOAA and EPA's proposed decision because they opposed withholding federal funding under CZMA Section 306 and CWA Section 319. They felt withholding funding would be counterproductive, as the funding under these two programs help to improve water quality and restore habitat. They argued that withholding funds would likely not result in the policy and programmatic changes NOAA and EPA seek and would negatively impact coastal communities and watershed groups that rely on the funding from NOAA and EPA to address polluted runoff and coastal habitat issues in the state. Furthermore, withholding funding would hurt two state programs and agencies, Oregon's Coastal Management Program in the Department of Land and Conservation and Development and Oregon's Nonpoint Source Management Program (in the Department of Environmental Quality) that have very little (if any) influence over the most significant remaining issues (i.e., forestry and agriculture). ~~two programs that help to improve water quality and restore habitat.~~

A few commenters noted NOAA and EPA should continue to work with Oregon to improve its water quality programs and that the state just needed additional time to meet the CZARA requirements.

Other commenters opposed NOAA and EPA's proposed finding. ~~Generally,~~ they stated Oregon did have adequate programs in place to meet, or in some cases exceed, the CZARA requirements and control polluted runoff. More specific comments are discussed in sections below.

Source: 1-C, 2-B, 4-A, 5-A, 8-B, 9-A, 13-A, 14-A, 14-C, 15-A, 16-B, 17-A, 19-B, 22-A, 22-C, 23-A, 24-A, 25-A, 25-B, 26-B, 28-A, 30-A, 30-B, 30-H, 31-A, 33-A, 33-B, 34-A, 35-A, 36-A, 36-B, 36-C, 37-B, 37-C, 37-D, 40-A, 41-A, 42-A, 42-B, 43-A, 44-A, 44-B, 46-A, 47-A, 48-B, 49-A, 53-A, 52-A, 54-A, 55-B, 56-C, 57-A, 64-B, 64-D, 66-B, 66-D, 68-B, 68-D

**Comment [CJ5]:** Is this for internal purposes or will we be releasing the comments table?

**Response:** NOAA and EPA appreciate the many comments received in response to the federal agencies proposed decision to find that Oregon has failed to submit an approvable program under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA). After carefully considering all comments received and the state's March 20, 2014, response to the proposed decision, NOAA and EPA continue to find that Oregon has failed to submit an approvable program. As described more fully in the final decision memorandum, ~~although Oregon has made tremendous progress in addressing many of the~~

~~original conditions placed on the state's program, the state has not satisfactorily met the conditions related to \*\*\*\* [add statement of where Oregon's program falls short] although Oregon has made tremendous progress in addressing many of the original conditions placed on the state's program. Therefore, NOAA and EPA find that the state has failed to submit a fully approvable program under Section 6217 of the Coastal Zone Act Reauthorization Amendments (CZARA).~~

Per the statute, beginning with FY 2015 federal funding, NOAA will withhold 30 percent of funding for Oregon under Section 306 of the Coastal Zone Management Act that supports implementation of the state's coastal management program and EPA will withhold 30 percent of funding for Oregon under Section 319 of the Clean Water Act that supports implementation of the state's nonpoint source management program.

Although some commenters would prefer NOAA and EPA provide Oregon with additional time to develop a fully approvable program and not withhold funding to the state, NOAA and EPA do not have that flexibility based on the statute and the settlement agreement with the Northwest Environmental Advocates. The Northwest Environmental Advocates sued NOAA and EPA in 2009 challenging the agencies' joint administration of Oregon's coastal nonpoint program. ~~The plaintiff's primary argument was that NOAA and EPA failed to take a final action on the approval (without conditions) or disapproval of Oregon's coastal nonpoint program, and failure to withhold funds from Oregon for not having a fully approved program. NOAA and EPA settled the lawsuit in 2010 and agreed make a final decision on the approvability of the program by May 15, 2014 (extended to January 30, 2015 based on the volume of public comments received).~~

**Comment [CJ6]:** Should we include the date in which the state was to have an EPA/NOAA approved program (that is, when the statute required EPA/NOAA to make a decision) or begin withholding funds?

#### B. State Legislature Has Been Obstructing ODEQ's Ability to Make Changes

**Comment:** One commenter stated that the Oregon Department of Environmental Quality (DEQ) has been working hard to get the improvements needed to improve water quality and meet all coastal nonpoint program requirements. However the State Legislature has been obstructing ODEQ's progress and is the one that needs to take action.

Source: 25-C

**Response:** ~~NOAA and EPA have been working closely with DEQ, DLCD, and other agencies to develop the state's coastal nonpoint program. We commend DEQ, Oregon Department of Land Conservation and Development (DLCD) and other state agencies for all of the changes they have made to improve water quality and work they have done in order to address the remaining conditions and to meet all coastal nonpoint program requirements. NOAA and EPA will continue to work with Oregon to assist in that effort. We hope that Oregon's legislature will take the necessary and appropriate actions to address all of the remaining conditions. The federal agencies' final determination on Oregon's program is not based on whether or not any state entity has been reportedly "obstructing" progress.~~

#### C. Federal and State Governments Have Responsibility to Manage Waters

**Comment:** One commenter stated that the Federal and State governments have a responsibility to manage waters in the public trust for maximum long-term benefit for current and future generations. They noted this was not being done.

**Comment [CJ7]:** May need to expand on why the commenter believed "this was not being done"

Source: 22-C

**Response:** Federal and state governments do have a responsibility to manage public waters for current and future generations. That is why NOAA and EPA are using the authority they have under CZARA to find that Oregon has failed to submit an approvable coastal nonpoint program and withhold funding from the state under Section 306 of the CZMA and Section 319 of the CWA.

**Comment [CJ8]:** I am not comfortable with this response as withholding funds does not necessarily lead to improved water quality etc. Maybe we can talk about the intent of Congress in providing EPA and NOAA with the role of approving the CZARA program and providing funding. Let me think about this.

## II. FUNDING

### A. Impacts of Withholding Funds

**Comment:** Commenters recognized that withholding funds under Section 306 of the Coastal Zone Management Act (CZMA) and Section 319 of the Clean Water Act (CWA) could negatively impact the state's ability to improve quality and support beneficial programs such as Total Maximum Daily Loads (TMDLs), Oregon Watershed Enhancement Board (OWEB) watershed planning and restoration projects, local land use planning, and the provision of technical assistance to coastal communities to help them address pressing coastal management issues such as coastal hazards, stormwater management, and growth management. A few commenters argued ~~were against~~ NOAA and EPA withholding funds from these programs because they felt withholding funding from two ~~important~~ programs for addressing polluted runoff and coastal habitat issues in the state would be counterproductive to accomplishing the goals of these programs and unlikely would likely not to result in the policy and programmatic changes NOAA and EPA are seeking. Others noted that withholding funding would hurt two state programs and agencies, Oregon's Coastal Management Program in the Department of Land and Conservation and Development and Oregon's Nonpoint Source Management Program in the ~~DE~~Department of Environmental Quality, that have very little (if any) influence over the most significant remaining issues (i.e., forestry and agriculture). Some commenters also noted that withholding funds would negatively impact coastal communities and watershed groups that also rely on this funding from NOAA and EPA.

Other commenters supported withholding funds even though they acknowledged it may have some negative impacts initially. They saw withholding funding as the only way to get action in the state to improve water quality and protect designated uses. One commenter also noted that NOAA and EPA's failure to withhold funding sooner allowed Oregon to limp along for over 16 years with inadequate management measures for its coastal nonpoint program while drinking water and other water quality impairments occurred.

Source: 1-C, 5-A, 8-B, 14-C, 16-B, 17-A, 25-A, 25-B, 25-D, 25-E, 25-F, 33-A, 33-B, 36-A, 36-B, 36-C, 37-B, 37-C, 37-D, 43-A, 48-B, 55-B, 64-B, 66-B, 68-B,

**Response:** NOAA and EPA recognize that withholding funding under Section 306 of the CZMA and Section 319 of the CWA could make it more difficult for Oregon to maintain the same level of effort on key programs that help improve water quality and protect salmon habitat, such as the state's coastal management, TMDL, and nonpoint source programs. However, the penalty provision in CZARA was designed to provide a financial disincentive to states to encourage them to develop fully approvable coastal nonpoint programs to provide better protection for coastal water quality in a timely manner. The statute directs NOAA and EPA to withhold funding when the agencies find a state has failed to submit an approvable coastal nonpoint program ~~which Oregon has done~~. NOAA and EPA will continue to help ~~Oregon direct some of its remaining federal CWA Section 319 and CZMA Section 306 funding, and~~



other federal funding sources, as appropriate, to develop a fully approvable coastal nonpoint program so that the funding reductions from the penalties can be eliminated as soon as possible.

**Comment [CJ9]:** May want to be careful on stating that EPA and NOAA will direct grant funding as grant regulations do not allow us to use grants to direct the state's work.

#### B. Oregon Stands to Lose \$4 million in Federal Funding

**Comment:** Several commenters stated that if NOAA and EPA's proposed finding that Oregon has failed to submit a fully approvable coastal nonpoint program stands, Oregon would lose \$4 million in federal funding.

*Source: 1-C, 14-C, 43-A*

**Response:** NOAA and EPA would like to correct this statement. Oregon only stands to lose \$4 million in federal funding if it continues fail to submit an approvable coastal nonpoint program. Based on current appropriations, that would not occur until \*\*\*. Each year, beginning with federal FY 2015, Oregon fails to submit an approvable program, the state will lose 30 percent of the state's allocation under Section 306 of the CZMA and Section 319 of the Clean Water Act. For FY 2015, that is only about \$\*\*\* in federal funding (a loss of \$\*\*\* for \$\*\* for CZMA Section 306 and \$\*\* for CWA Section 319).

**Comment [CJ10]:** According to the recommended option and assuming we continue to receive around the same allocation, Ex. 5 - Deliberative

**Ex. 5 - Deliberative**

### III. AUTHORITIES UNDER THE COASTAL ZONE ACT REAUTHORIZATION AMENDMENTS (CZARA)

#### A. Suitability of Voluntary Approaches Backed By Enforceable Authorities

**Comment:** Several commenters noted that CZARA requires coastal states to have enforceable mechanisms for each management measure. They were not satisfied with the voluntary approaches Oregon was using to address many CZARA management measure requirements. They noted that the voluntary approaches were not being adhered to and that Oregon was not using its back-up authority to enforce and ensure implementation of the CZARA management measures, when needed. A few commenters also noted that Oregon had not described the link between the enforcement agency and implementing agency and the process the agencies will use to take enforcement action when voluntary approaches are not adequate to protect water quality. Another commenter noted that voluntary approaches will not work and that the state needed to adopt approaches that could be enforced directly.

*Source: 15-C, 15-D, 16-A, 28-E, 30-O, 46-H, 49-J*

**Response:** States must have enforceable policies and mechanisms to implement the CZARA management measures (see Section 306(d)(16) of the Coastal Zone Management Act). As the NOAA and EPA January 1993 *Coastal Nonpoint Pollution Control Program Development and Approval Guidance* states, "these enforceable policies and mechanisms may be state or local regulatory controls, and/or non-regulatory incentive programs combined with state enforcement authority." Therefore, voluntary, incentive-based programs are acceptable approaches for meeting the CZARA management measure requirements as long as the state has demonstrated it has adequate back-up authority to ensure implementation of the CZARA managements, when necessary.

For coastal nonpoint program approval, CZARA requires NOAA and EPA to assess whether or not the state “provides for the implementation” of 6217(g) management measures (Section 6217(b)). In other words, does the state have processes in place that are backed by enforceable policies and mechanisms to implement the 6217(g) management measures? In approving a state’s coastal nonpoint program, NOAA and EPA cannot consider how well those processes, including voluntary ones, are working or being enforced. Program implementation and evaluation of the effectiveness of that implementation coastal nonpoint programs are conducted ~~comes~~ after program approval. Section 6217(c)(2) of CZARA calls on states to implement their approved programs through changes to their nonpoint source management plan, approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act. Therefore, NOAA and EPA evaluate how well a state is implementing its coastal nonpoint program through assessing the effectiveness of the routine assessment mechanisms for the state’s Nonpoint Source Management Program and Coastal Management Program annually as part of the process of providing funding.

In 1998 and 2001, NOAA and EPA issued additional guidance on exactly what states need to do demonstrate they have adequate back up authority for voluntary, incentive-based programs. This includes, as the commenter referenced, a description of the mechanism or process that links the implementing agency with the enforcement agency and a commitment to use the existing enforcement authorities where necessary. (See *Final Administrative Changes to the Coastal Nonpoint Pollution Control Program Guidance for Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 and Enforceable Policies and Mechanisms for State Coastal Nonpoint Programs*. Both guidance documents are available at <http://coastalmanagement.noaa.gov/nonpoint/guide.html>.)

Contrary to a few commenters, the federal agencies believe the state has sufficiently demonstrated the link between implementing and enforcing agencies as well as a commitment to use that authority for New Development and OSDs management measures\*\*\*\*. However, NOAA and EPA agree with the commenter that the state has not met all the requirements for relying on voluntary programs, backed by enforceable authorities, to address its remaining conditions related to additional management measures for forestry as well as ~~[agriculture and onsite sewage disposal systems?]~~. The rationales for those conditions in the final decision document on Oregon’s Coastal Nonpoint Program explain why NOAA and EPA have made those findings.

## B. Federal Government Taking Over Oregon’s Coastal Nonpoint Program

**Comment:** One commenter noted that NOAA and EPA have an obligation to step in for Oregon and take over its coastal nonpoint pollution control program since the state lacks the will to address its polluted runoff issues.

Source: 55-C

**Response:** Unlike some of the EPA water quality programs under the Clean Water Act, like the National Pollutant Discharge Elimination System (NPDES) ~~Stormwater Program~~, CZARA provides for exclusive state and local, not federal, decision-making regarding the specific land-use practices that will be used to meet the coastal nonpoint program management measures. The act does not provide NOAA or EPA with

**Comment [AC11]:** How much do we want to emphasize this because our current evaluations do not do a very detailed assessment of how when the CNP is working—only at a very high level and under the new CZM evaluation process only if water quality is a priority issue for the state’s coastal mgmt program.

**Comment [CJ12R11]:** Your point that the approval process is not where we evaluate performance just whether the state has the mechanisms is a good one. I think it is important to include this information, as we need to explain when EPA and NOAA would review the effectiveness and implementation of the coastal NPS programs. At EPA, we are required to conduct an annual review of the state’s NPS program including coastal NPS and make a determination of satisfactory progress or we can withhold funding. In reality, we have not withheld funding although sometimes we will hold back some funding until certain issues are addressed.

**Comment [AC13]:** Right now this is new devel and maybe OSDs. Unsure what we’ll say on Ag at this time. Will need to update this once we’ve made final decisions on rationales. May not include new devel since we’re approving that one???

**Comment [CJ14R13]:** Changes made as of 8/13 and assumes Mgt agrees with our recommendation.

**Comment [AC15]:** Is this sufficient or do we need to reiterate ourselves? Perhaps we could prefer them to specific page #s?

**Comment [CJ16R15]:** Since we will be issuing both documents at the same time, I recommend referencing the page numbers unless there are a few sentences in the rationales that would concisely address this issue and would make sense to quote here.

the authority to take over, or implement, a state's coastal nonpoint program if the state fails to act. The law

**Comment [CJ17]:** Missing some language. Is this where we mention that a state can opt out of the program or should we be silent on this?

### C. Oregon Needs More Time to Develop Its Coastal Nonpoint Program

**Comment:** A few commenters stated NOAA and EPA should give Oregon additional time to develop a fully approvable coastal nonpoint program. They noted that developing a program and addressing the remaining conditions NOAA and EPA placed on the state's program is very challenging and that the state has made significant progress since gaining conditional approval. They also noted that the state is continuing to make additional improvements, such as the initiating rulemaking process to achieve better riparian protection for fish-bearing streams ~~the Oregon Department of Forestry and Board of Forestry is currently undertaking, but that the state needs more time before the new rule is adopted.~~

A few other commenters noted that Oregon has had plenty of time since receiving conditional approval for its coastal nonpoint program in 1998 and that water quality is no better now that it was 16 years ago.

Source: 14-D, 33-C, 28-F

**Response:** NOAA and EPA have already provided Oregon sufficient time to develop a fully approvable coastal nonpoint program. The Per a settlement agreement with the Northwest Environmental Advocates and the federal agencies set a deadline for must making a final decision of by May 15, 2014, (subsequently extended to January 30, 2015, based on the numerous public comments received), regarding whether or not Oregon has failed to submit an approved (without conditions) coastal nonpoint program.

CZARA, passed in 1990, provided all coastal states participating in the National Coastal Zone Management Program 30 months after the date ~~(January 1993)~~ EPA published the final program guidance (January 1993) to submit a coastal nonpoint program for approval. The statute also stated NOAA and EPA shall withhold funding from CZMA Section 306 and CWA Section 319, respectively, beginning as early as 1996 if the agencies found a state had failed to submit an approvable program.

Recognizing the complexities involved in developing a coastal nonpoint program and the time involved to develop programs, backed by enforceable policies, to implement the 56 management measures, NOAA and EPA initially approved all state programs, with conditions, they needed to address. NOAA and EPA also additional guidance memos notes that if NOAA and EPA find the state has failed to submit an approvable programs as early as 1996,

**Comment [CJ18]:** May want to include the date in which NOAA/EPA approved Oregon's program with conditions.

**Comment [CJ19]:** Missing language here. Is this where you note that the withholding of funds will end when Oregon submits an approvable program?

### D. CZARA Requires State to Address Issues that are Outside of Its Control

**Comment:** One commenter disagreed with the Coastal Nonpoint Program regarding its requirement that states have to meet all CZARA management measures. They noted that some measures, such as onsite sewage disposal systems, are often addressed at the local level, and therefore, outside of the state's jurisdiction.

Source: 10-B

**Response:** NOAA and EPA do not agree that states are ~~should not be~~ required to meet the onsite sewage disposal system (OSDS) management measures ~~even though many of the issues could be because they are often addressed~~ at the local level. The CZARA statute requires all coastal states participating in the National Coastal Zone Management Program to develop coastal nonpoint programs that “provide for the implementation, at a minimum, of management measures in conformity with the guidance published under subsection (g)...” (See Section 6217 (b)). The 1993 guidance EPA developed to comply with subsection (g), *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*, outlines two management measures related to new and existing onsite sewage disposal systems (OSDS) that states must address.

NOAA and EPA recognize that local governments often play a significant role in managing OSDS. Recognizing this, the federal agencies have accepted a variety of approaches states use to meet these management measures that have relied on direct state-level authority, a mixture of state and local-level authorities, or state-led voluntary approaches backed by enforceable authorities. As described by NOAA and EPA’s 1998 conditional approval findings and 2015 decision memorandums describe, Oregon satisfies the OSDS management measures through a combination of direct state authorities and arrangement with the Relators’ Association to promote voluntary inspections at the time of property transfer.

**Comment [CJ20]:** Do we want to include page numbers in which to find this information?

#### E. NOAA and EPA are Holding Oregon to a Higher Standard

**Comment:** One commenter stated NOAA and EPA were holding Oregon to a higher standard than other states. Raising the approval threshold for Oregon compared to other states was unfair to Oregon. NOAA and EPA should focus on helping Oregon meet the previously established minimum standards for other state coastal nonpoint programs rather than requiring Oregon to meet a higher bar.

Source: 10-A

**Response:** NOAA and EPA are not holding Oregon to a higher standard than other states. The CZARA statutory requirements and 6217(g) guidance that is the federal agencies used to evaluate Oregon’s program are the same that is used to evaluate every other states’ program. Oregon, along with Washington and California, did receive conditions placed on their programs requiring the states to develop additional management measures for forestry that went beyond the basic CZARA 6217(g) forestry management measures. This was done in recognition of salmon and the more stringent water quality requirements they required. Even though the three Pacific Northwest states had programs in place to satisfy 6217(g) forestry management measures, impacts to salmon and salmon habitat were still occurring due to forestry so additional management measures for forestry were needed.

**Comment [AC21]:** Not sure how much we want to get into the add MM for forestry issue here. The add MM for forestry requirement for OR is much more specific than those for WA and OR so many could say that that was holding OR to a higher standard?

Oregon, however, is the only state where NOAA and EPA have been sued over the agencies’ ability to conditionally approve a state’s coastal nonpoint program. That lawsuit was settled and EPA and NOAA entered into a settlement agreement with the plaintiff which requires NOAA and EPA to meet certain deadlines that do not apply to other states. The settlement agreement requires EPA and NOAA to make a final decision on the approvability of Oregon’s program by May 15, 2014 (extended to January 30, 2015, due the number of public comments received).

### Ex. 5 - Deliberative

#### F. Need to Take a Tailored Approach to NPS Control

**Comment:** A few commenters were concerned that NOAA and EPA were applying a one-size-fits all approach to addressing nonpoint source pollution in Oregon by requiring the state to meet specific national management measures. They felt that a more tailored approach that considers Oregon's specific circumstances would be more appropriate.

Source: 8-C, 10-E

**Response:** By its nature, CZARA gives states great deference to develop programs that are consistent with the broad national 6217(g) management measure requirements yet are tailored to meet the state's specific circumstances. Section 6217 does not provide NOAA or EPA with authority to require states or local governments to take specific actions to address coastal nonpoint source pollution. Rather, NOAA and EPA work with the state to find the best approach for each state yet is consistent with the overarching CZARA requirements.

As required by section 6217 (g), EPA published, *Guidance Specifying Management Measures for Sources of Nonpoint Pollution in Coastal Waters*. The guidance specifies 56 management measures that form the core requirements of a state's coastal nonpoint program. While the guidance establishes baseline standards for addressing broad categories and sources of nonpoint source pollutants, there are many different approaches states, like Oregon, can take or ~~(and have)~~ taken to be consistent with the overarching 6217(g) management measure requirements.

NOAA and EPA have suggested various approaches Oregon could take to meet the 6217(g) management measures but the decision regarding the specific land-use practices that the state uses to meet the measures rests with the state. For example, Oregon originally proposed to address the condition on its program about ensuring routine inspections of existing onsite sewage disposal systems with a rule change that would have required inspections at the time of property transfer. When the rule change did not pass, NOAA and EPA worked with the state to come up with a suitable alternative that involved working with the Realtors' Association to develop a voluntary point of sale inspection program that was backed by enforceable authorities. Both of these approaches ~~that would satisfy~~ the 6217(g) management measure (see decision rationale for additional details).

#### G. Coastal Nonpoint Program Needs to Address Climate Change

**Comment:** One commenter noted that Oregon's Coastal Nonpoint Program needs to address climate change; water shortages and toxins will become even more pressing issues as the climate continues to change.

Source: 50-A

**Response:** Climate change is an important issue facing coastal states and can have an impact on coastal water quality. NOAA and EPA take climate change very seriously and are involved in a number of initiatives to help states and other entities become more resilient to climate change. For example through the National Coastal Zone Management Program NOAA has been providing financial and technical assistance to Oregon to encourage local governments to incorporate hazards and climate change considerations into their local comprehensive plans. Specifically, NOAA and Oregon have been working with local governments to plan for and reduce exposure to climate-related natural hazards in

Oregon's coastal zone. Also, through <sup>\*\*\*</sup> EPA [provide a specific example of how EPA is working with Oregon to be more resilience to climate change?]

**Comment [CJ23]:** I will need to ask a few others in order to provide a suitable example. I know our Region is collecting input into developing a policy that encourages incorporating climate change/sustainability into grants.

However, CZARA, does not have any specific requirements for states to address climate change through their coastal nonpoint programs. When approving state coastal nonpoint programs, NOAA and EPA must make sure each state satisfies the requirements laid out in the 1993 *Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters*, developed pursuant to Section 6217(g). The 1993 guidance only contains a few mentions of climate change in the discussion of several suggested best management practices a state could employ to implement the management measure. The discussion for the new onsite sewage disposal system management measure mentions that the rate of sea level rise should be considered when siting onsite sewage disposal systems and the discussion for the stream bank and shoreline erosion management measure notes that setback regulations should recognize that special features of the streambank or shoreline, may change, providing an example of beaches and wetlands that are expected to migrate landward due to rising water levels as a result of global warming. However, none of these are required elements for a state's coastal nonpoint program.

**Comment [CJ24]:** Would mentioning implementing the coastal NPS programs would be the best places in which to incorporate climate change concerns. EPA now requires state's NPS management plan to be updated every 5 years and requires the program to integrate climate change planning (see page 54 of the 319 guidance at <http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf>) Oregon is currently public noticing their draft plan at <http://www.deq.state.or.us/wq/nonpoint/docs/2014NPSDraftPlan.pdf> In doing a word search of the draft plan I found that Oregon's restoration grants The Restoration Grant Program is a competitive grant program that awards funds to local partners for projects to improve watershed health and address a variety of issues including climate change adaptation (page 72).

#### IV. GENERAL—WATER QUALITY, MONITORING, AND ENFORCEMENT

##### A. Status of Oregon Coastal Water Quality Should Inform NOAA and EPA Decision

**Comment:** Many commenters expressed the need for Oregon to do more to improve coastal water quality and protect designated uses. They believe the fact that many coastal water quality problems in the state still exist demonstrates that Oregon's existing programs to control coastal nonpoint source pollution are inadequate and that the state needs to do more to strengthen its coastal nonpoint program. Specific concerns cited included failure to meet water quality standards, numerous TMDLs for temperature, sediment, and/or toxics, impaired drinking water, and recent federal species listings under the Endangered Species Act for salmon, salmon habitat, amphibians, and wildlife. For example, several commenters cited the recent federal listings for Southern Oregon Northern California Coast coho salmon as illustrative of how salmon populations and habitat have continued to decline, due, in part, to human-related water quality and habitat impairments. Commenters specifically called out activities from timber harvesting, agriculture and urban development as a reason for these impairments. Commenters also stated that Oregon fails to identify land uses causing or threatening water quality and because the state ignores technical information available about land uses that consistently cause or contribute to violations of water quality standards in coastal watershed.

Several other commenters noted that recent improvements in Oregon's coastal water quality and salmon runs demonstrate that the state's coastal nonpoint pollution control program is effective. One commenter stated that Oregon streams are among the cleanest in the country and provide good water for aquaculture. A few other commenters noted the good work and water quality and habitat improvements made by watershed groups, Oregon Watershed Enhancement Board (OWEB), Soil and Water Conservation Districts, and the voluntary efforts the timber industry and farmers (cattlemen) have implemented on their own. For example, one commenter cited an Oregon Department of Fish and Wildlife study that shows many out-migrating and returning salmon to Tillamook State forest land and described how collaborative restoration efforts of federal, state, county and private citizen groups have effectively worked together to improve the Tillamook watershed. Another commenter stated there was too much focus on the need to see water quality improvements; rather, given the increase in population

**Comment [CJ25]:** Not sure I understand. What does the study say about salmon? Is there an improving trend? How does the commenter link these results to our proposed decision?

and other development pressures in recent decades, even maintaining water quality levels should be considered a success.

Source: 1-A, 1-B, 5-B, 8-A, 10-C, 11-A, 14-B, 15-E, 19-B, 19-E, 20-A, 20-D, 22-D, 25-A, 26-A, 28-F, 30-B, 30-I, 30-O, 31-B, 35-A, 35-B, 35-C, 39-A, 42-B, 42-C, 42-I, 43-F, 44-B, 48-C, 56-B, 57-GG, 57-NN, 57-VV, 82-C, 82-E, 83-C, 83-D

**Response:** NOAA and EPA recognize that the achievements of voluntary programs, such as OWEB and SWCDs, play an important role in addressing nonpoint source management and improving water quality in coastal Oregon. Oregon does have some noteworthy successes, such as returning salmon populations to the Tillamook watershed. However, as other commenters pointed out and the state's recent 303(d) list reflects, the state still grapples with impaired waterbodies that are not achieving water quality standards or supporting designated uses such as domestic water supply (drinking water) and fish and aquatic life (i.e., salmon).

Although NOAA and EPA have found that Oregon does not yet have a fully approvable coastal nonpoint Program and must do more to reduce polluted runoff, specifically related to forestry (see final decision rationale), this finding is not driven by the current status of coastal water quality in Oregon. CZARA does not require states to have clean water throughout their coastal nonpoint program management areas before receiving full approval for their coastal nonpoint programs. Rather, CZARA employs an adaptive management approach. States, like Oregon, must have processes in place to implement the 6217(g) management measures as well as have processes in place to identify and implement additional management measures, when needed (i.e., when the existing 6217(g) management measures are not sufficient for achieving water quality standards and protecting designated uses (see Section 6217(b)).

**Comment [CJ26]:** Should we highlight forestry especially since we have serious concerns about agriculture too or leave this out.

**Comment [CJ27]:** May need to define what is meant by adaptive management approach.

The legislative history (floor statement of Rep. Gerry Studds, House sponsor of section 6217) acknowledges indicates that implementation of 6217(g) management measures is "intentionally divorced from identified water quality problems because of the enormous difficulty of establishing cause and effect linkages between particular land use activities and specific water quality problems." Therefore, as noted above, when deciding whether or not to fully approve a state's coastal nonpoint program, NOAA and EPA assess whether or not a state has appropriate technology-based management measures in place, not on whether the approaches effectively achieve water quality standards and the current status of the state's water quality.

**Comment [CJ28]:** I suggest deleting this phrase as imposing additional management measures does imply the MMs in the guidance will not result in meeting WQS so it could confuse the reader.

## B. Need Improved Water Quality Monitoring

*Note: See also specific comments related to Agriculture-Monitoring and Tracking, Pesticides-Monitoring and Tracking, and Forestry-Pesticides.*

**Comment:** Several commenters stated their concern about over the inadequacy of Oregon's water quality monitoring programs, especially related to monitoring after aerial application of pesticides and herbicides on forest lands. Commenters noted that Oregon does not have monitoring programs in place to adequately assess whether or not pollution controls are achieving their goals and protecting water quality. Therefore, it is difficult for the state to determine if and when additional management measures are needed as CZARA requires.

Commenters suggested several different monitoring approaches Oregon needed to require and implement in order to adequately protect water quality. These included: requiring turbidity monitoring of streams during and after rainstorms and taking enforcement action when excess turbidity is found; requiring recurrent road surface condition monitoring; requiring more frequent inspections of drinking

water, especially when pesticide spraying occurs; and improving upon a recently developed strategy for determining agricultural landowners' compliance with water quality rules.

Several other commenters stated Oregon's monitoring and tracking programs were adequate and touted the State's greater focus on water quality monitoring over the past few years.

Source: 2-A, 30-R, 42-G, 42-H, 46-H, 49-I, 57-BB, 71-??, 84-??.

**Response:** NOAA and EPA recognize commenters are concerned about the adequacy of Oregon's water quality monitoring programs and that the existing monitoring efforts are not robust enough to observe potential impacts from pesticide application and other land uses and to determine when and if additional management measures are needed. The federal agencies also recognize Oregon's efforts over the past few years to improve its water quality monitoring efforts, such as the state's Enterprise Monitoring Initiative, and strongly encourage the state to make continued improvements onto improve its monitoring and tracking of coastal nonpoint source pollution and best management practice implementation within the coastal nonpoint management area.

**Comment [AC29]:** Will need to revisit this response based on final statements in decision rationale for ag and forestry.

~~However,~~ NOAA and EPA did not propose a decision on the approvability of the overall monitoring and tracking elements of Oregon's Coastal Nonpoint Program and did not solicit comment on this issue at this time. The public will have an opportunity to comment on this aspect of Oregon's program at some point in the future before the agencies fully approve Oregon's coastal nonpoint program. (See the appropriate Forestry and Agriculture sections in this document for responses to specific comments related to the monitoring and tracking efforts related to Oregon's forestry and agriculture programs.)

**Comment [CJ30]:** This is where we might want to include our standard language to be developed.

### C. Enforcement

**Comment:** One commenter noted that Oregon fails to systematically address water quality standard violations caused by excess sedimentation.

Source: 57-UU

**Response D.4:** CZARA requires state coastal nonpoint programs need to "provide for the implementation" of the 6217(g) management measures (Section 6217(b)). Therefore, when evaluating whether or not the state has satisfied its CZARA requirements, NOAA and EPA do not consider how well a state is implementing or enforcing its laws and programs that comprise its coastal nonpoint program (or whether or not these programs are meeting water quality standards). For coastal nonpoint program approval, NOAA and EPA only consider whether or not a state has programs and processes in place to meet the 6217(g) management measure requirements.

Evaluating how well a state is implementing its approved coastal nonpoint program comes later. Section 6217(c)(2) of CZARA notes that states shall implement their approved programs through changes to its nonpoint source management plan, approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act. ~~Therefore, NOAA and EPA evaluate how well a state is implementing its coastal nonpoint program through routine assessment mechanisms for the state's Nonpoint Source Management Program and Coastal Management Program.~~

Program implementation and evaluation of the effectiveness of that implementation coastal nonpoint programs are conducted after program approval. Section 6217(c)(2) of CZARA calls on states to implement their approved programs through changes to their nonpoint source management plan,

**Comment [AC31]:** How much do we want to emphasize this because our current evaluations do not do a very detailed assessment of how when the CNP is working—only at a very high level and under the new CZM evaluation process only if water quality is a priority issue for the state's coastal mgmt program.



approved under Section 319 of the Clean Water Act, and through changes to its coastal zone management program, developed under Section 306 of the Coastal Zone Management Act.

States are required to update their nonpoint source management plans every 5 years and submit to EPA for approval. Oregon recently drafted an updated plan, provided the public an opportunity to review the draft plan during August 2015 and finalized the plan on . This plan can be found at

The key components of the updated plan can be found in EPA's "Nonpoint Source Program and Grants Guidelines for States and Territories" on page 53 (see <http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf>). Annually EPA reviews the progress that each state is making in implementing its nonpoint source (NPS) management program and provides written documentation of this progress. Specifically, prior to approving funding recommendations for the award of section 319 funds, the Regions completes the review covering the prior year to determine the state has made satisfactory progress on implementing its NPS management program. EPA's checklist is designed to document the extent to which each state meets foundational aspects of program progress and CWA section 319 grant management requirements, including those specified in binding section 319 grant guidelines available at [www.epa.gov/nps/319](http://www.epa.gov/nps/319) and can be found in EPA's "Nonpoint Source Program and Grants Guidelines for States and Territories" on page 70 (see <http://water.epa.gov/polwaste/nps/upload/319-guidelines-fy14.pdf>). ~~Insert something on 319 evaluation mechanisms.~~

The CZMA calls on NOAA to conduct routine evaluations of state coastal management programs. During these evaluations, NOAA assesses how well states are implementing their approved coastal management programs, administering federal grant funding under the program, and achieving the goals of the National Coastal Zone Management Program, including "the management of coastal development to improve, safeguard, and restore the quality of coastal waters, and to protect natural resources and existing uses of those waters" (See CZMA Section 303(2)(c)).

Also, as stated in the introductory chapter of the 6217(g) guidance, *Guidance Specifying Management Measures for Sources of Nonpoint Source Pollution in Coastal Waters*, the legislative history (floor statement of Rep. Gerry Studds, House sponsor of section 6217) acknowledges that the management measures are based on technical and economic achievability rather than achieving particular water quality standards. The legislative history indicates that implementation of management measures was "intentionally divorced from identified water quality problems because of the enormous difficulty of establishing cause and effect linkages between particular land use activities and specific water quality problems." Therefore, as noted above, under the Coastal Nonpoint Program, NOAA and EPA assess whether or not a state has appropriate ~~technology-based~~ management measures in place, not whether the approaches effectively achieve water quality standards.

If, after implementing the technology-based the 6217(g) management measures, water quality impairments are still occurring, CZARA employs an adaptive approach. The Act requires states to provide for the implementation of additional management measures within identified areas to address land uses that are either currently causing water quality impairments or where reasonably foreseeable new or expanding land uses could threaten coastal water quality (Section 6217 (b)(3)).

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**Comment [CJ32]:** Right now it is undergoing public review. I am assuming that the final will be final by the time we release this document. Will need to check back.

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**Comment [CJ33]:** Explain what is meant by "adaptive approach" in the context of CZARA.

## V. CRITICAL COASTAL AREAS AND ADDITIONAL MANAGEMENT MEASURES

### A. Process for Identifying Critical Coastal Areas and Additional Management Measures is Not Effective

**Comment:** One commenter states that Oregon’s process for identifying critical coastal areas and the need for additional management measures, which relies largely on the state’s Clean Water Act 303d listing process for impaired waters and TMDL program, is flawed in several ways. Specifically, the commenter believes Oregon’s Clean Water Act 303d listing process is not effective. The state fails to meet the 303d list regulatory requirements to “assemble and evaluate all existing and readily available water quality related data and information to develop the list” and the state does not use nonpoint source assessments to develop its 303d lists. The commenter also states that Oregon ignores a variety of technical information available to help identify land uses that consistently cause or contribute to water quality standard violations. In addition, the commenter noted that Oregon does not use TMDLs to identify critical coastal areas and assess where existing CZARA management measures are not adequate for meeting water quality standards, as required for CZARA approval. The commenter also notes that the associated TMDL water quality management plans do not support an effective coastal nonpoint program. For example, despite the numerous temperature TMDLs that have been developed in Oregon’s coastal watershed, the commenter notes that load allocations have not been used to determine minimum riparian buffer width, height, or density to achieve the load allocation.

Source: 57-KK, 57-LL, 57-MM, 57-NN, 57-QQ, 57-RR, 57-SS, 57-TT

**Response:** NOAA and EPA did not propose a decision on the approvability of Oregon’s process for identifying critical coastal areas and additional management measures and did not solicit comment on this issue at this time. The public will have an opportunity to comment on this aspect of Oregon’s program at some point in the future before the agencies fully approve Oregon’s coastal nonpoint program.

### B. NOAA and EPA Lack Authority to Require Additional Management Measures

**Comment:** A few commenters stated NOAA and EPA do not have the authority to require Oregon to develop additional management measures that go beyond the original management measures in the CZARA guidance. They state that the programmatic guidance for the Coastal Nonpoint Program calls on the state, not NOAA and EPA, to identify additional management measures, if necessary, to achieve and maintain water quality standards. They assert the guidance further states that state is to identify additional management measures only within state-designated critical coastal areas to address state-identified land uses that may cause or contribute to water quality degradation.

Other commenters noted that CZARA requires Oregon to demonstrate that it has additional management measures in place to meet water quality standards and protect designated uses. The commenters noted that Oregon has not met this requirement since water quality standards are still not being met and designated uses are not being protected. They are supportive of placing additional management measure requirements on Oregon’s coastal nonpoint program and suggested specific measures or nonpoint source issues the additional measures needed to address (see specific comments below).

Source: 15-E, 28-E, 30-B, 30-O, 57-CC, 71-E, 71-I, 71-H

**Comment [AC34]:** This would also be fairly easy to respond to based on what CZARA requires: processes for IDing land uses, CCAs, and add MMs within those CCAs to address problem land uses which the state has. For approval purposes, we do not evaluate how well these processes are being implemented (see response to “Enforcement” comment above). However, while it could be helpful to get that out now, it goes against our decision not to provide substantive responses to aspects of Oregon’s program we did not solicit comment for.

**Comment [CJ35R34]:** You could include both responses.

**Comment [AC36]:** Awaiting final decision from Mgmt Team

## Response:

### VI. PESTICIDES AND TOXICS—GENERAL

*Note: NOAA and EPA received a variety of comments related to pesticides. Summaries of the general pesticide comments and the federal agencies' responses are provided here. See Agriculture-Pesticides and Forestry-Pesticides for a full discussion of the comments received related to pesticides.*

#### A. Adequacy of Oregon's Coastal Nonpoint Program to Address Pesticides and Other Toxics

**Comment:** Several commenters noted that Oregon needs to improve how it addresses nonpoint source pollution caused by toxics, including pesticides, herbicides, and superfund contaminants. Commenters specifically noted they believed there was excessive use of toxic chemicals in agriculture and forestry practices. One commenter was also concerned about superfund contamination impacting shellfish harvests.

Commenters expressed their concerns with the ability of Oregon's existing pesticide management program to protect the quality of water in streams and groundwater as well as protect human health and aquatic species. One commenter supported this statement by citing results from a watershed council herbicide study that found that pesticides used along roadsides, agricultural fields, and forestry operations were all evident in Oregon's waterways. They noted that while applicators may have applied the herbicide correctly, the study demonstrates runoff is still occurring, indicating that the State's rules are ineffective at protecting water quality from herbicide application. Several other commenters also felt the Federal Insecticide, Fungicide and Rodenticide Act (FIFRA), coupled with the state's pesticide rules and its Water Quality Pesticide Management Plan, were insufficient to control polluted runoff from pesticide application to Oregon's coastal waters.

A few commenters also stated that not only do they believe Oregon has weak pesticide laws but compliance with the existing rules is poor. One commenter asserted that evidence suggested that federal label restrictions for Atrazine are not being followed. Other commenters complained about the state's poor record keeping of pesticide application and inadequate notice with spraying would occur near their neighborhoods and homes. In addition, one commenter contended that Oregon's pesticide rules were much weaker compared to neighboring states.

Commenters emphasized the need for greater pesticide protection for all land uses within Oregon's coastal zone, especially for agriculture and forestry practices. In particular, several commenters called out that better controls, including larger buffer requirements, are needed for the aerial application of pesticides and herbicides, especially near streams.

One commenter cited various studies to demonstrate pesticide impacts to human health and the environment from one commonly used herbicide, glyphosate. For example, a few studies in the late 1990s and early 2000s linked exposure to glyphosate to an increased risk of non-Hodgkin lymphoma. Other health effects from exposure to glyphosate described by the commenter included breast cancer, ADD/ADHD, increased risks of late abortion, endocrine disruption, and possible increased risk of multiple myeloma. According to studies from the late 2000s, glyphosate causes altered immune responses in fish, and Roundup, a commonly used glyphosate product, is lethal to amphibians. Other environmental impacts from glyphosate were also described. The commenter contended that these

human health and environmental impacts have been attributed to exposure to levels of glyphosate below the EPA set standards. The commenter also stated that studies that show adverse health effects of other formulated glyphosate products.

Other commenters disagreed. The believed Oregon has adequate pesticide controls in place which are consistent with CZARA 6217(g) requirements. Landowners were required to follow the FIFRA label requirements and meet additional state requirements. In addition, the EPA-approved, Oregon Water Quality Pesticide Management Plan provides additional description of the State's approach to pesticide management.

*Source: 2-B, 17-C, 32-A, 38-A, 41-A, 46-H, 54-B, 54-D, 54-F, 54-H, 54-I, 54-M, 54-N, 54-O, 54-Q, 54-R, 54-S, 57-GG, 57-HH, 57-II, 57-ZZ, 71-AH, 71-AI, 71-AJ, 71-AK, 81-B, 83-E, 83-M*

**Response:**

- Brief Statement about our decision(s) regarding pesticides for Ag and Forestry (ref decision rationale for greater detail and our authorities under CZARA.
- Acknowledge concern with pesticide use and encouragement to Oregon to continue to strengthen programs.
- NOAA and EPA will continue to work with Oregon within our authorities, to ensure water quality, human health, and aquatic sps. Protection.
- CZARA does not speak to superfund contaminates. Rather superfund contaminants are more appropriately addressed through the Comprehensive Environmental Response, Compensation, and Liability Act (the Superfund Act).

**B. Pesticides—Adequacy of Pesticide Monitoring Efforts**

**Comment:** Several commenters noted the need for Oregon to strengthen its pesticide monitoring efforts. They stated that Oregon did not have a program in place to determine if federal label requirements are being followed, nor did it monitor widely and regularly for pesticide runoff. One commenter noted that while unknown and unmonitored pesticide uses are a problem, unknown and unmonitored health and environmental risks from pesticides are also a significant problem.

Commenters discussed various monitoring programs that are needed in Oregon, including programs to: monitor pesticide use and impacts; assess whether pesticide management practices are sufficiently reducing pollution and improving water quality; monitor for pesticides in the air, which eventually deposit onto surface waters and soils; monitor for pesticides in coastal watersheds; monitor for pesticides in surface and drinking waters following an aerial spray event; and track whether federal label laws are being complied with.

One commenter also stated that most pesticide risk assessments are based on old and incomplete data and endpoint evaluations and that these needed to be updated with more current information for a

better understanding of the true impact of pesticides and acceptable exposure limits. In addition there was little to no understanding of effects from “inert” ingredients in pesticides. The commenter believed that there needed to be more testing and disclosure of these inert ingredients.

A few commenters objected to NOAA and EPA’s statement in the proposed decision document commending the State’s Water Quality Pesticide Management Plan and new pilot pesticide monitoring study. They did not think these programs should be praised as part of Oregon’s Coastal Nonpoint Program. They did not believe the State’s claim that pesticide monitoring would support an adaptive approach and demonstrate when additional controls are needed. They stated that Oregon conducted very little pesticide monitoring to drive an adaptive approach and that none of the pilot monitoring sites are located in the coastal zone.

*Source: 54-E, 54-F, 54-S, 57-ZZ,*

**Response:**

## **VII. NEW DEVELOPMENT**

**Comment:** Many commenters agreed with NOAA and EPA’s proposed finding that Oregon has failed to fully address CZARA requirements for new development, specifically that the state has not provided a commitment to use its back-up authorities to ensure implementation of the management measure requirements when needed. However, a few commenters did not believe Oregon had an effective program to control stormwater runoff from new development and meet water quality standards. They noted that the state needed to do more than the voluntary program described. For example, one commenter noted that the TMDL Implementation Guidance must require (not recommend) DMAs to follow NPDES Phase II requirements for small MS4s. Another option that was suggested was that NOAA and EPA should require the state to incorporate the CZARA new development management measures into an existing NPDES General Permit or craft a new permit.

Not all commenters were supportive of new regulatory requirements to address the new development management measure. For example, one commenter preferred that the state use its existing authorities and stormwater permits more effectively rather than place additional requirements on small cities and counties. The commenter noted that small cities and counties are not the main source of impairment and often lack the technical expertise and financial resources to meet the new requirements. They suggested the coverage for the 1200C NPDES general permit could be expanded by decreasing the acreage threshold for the permit or using an approach similar to the 1200OCS permit used to address water quality problems in the Columbia Slough.

*Source: 11-B, 13-B, 15-G, 34-B, 34-C, 34-D, 80-C*

**Response E.1:**

## VII. ONSITE SEWAGE DISPOSAL SYSTEMS

### A. Adequacy of Oregon's Programs to Meet CZARA Requirements for OSDS

**Comment:** Many commenters agreed with NOAA and EPA's proposed finding that Oregon has failed to fully address CZARA requirements for existing onsite sewage disposal systems, specifically ensuring routine inspections. While some commenters were supportive of the state's planned outreach efforts to promote voluntary inspections, they agreed with NOAA and EPA that Oregon does not have a tracking program in place to assess the effectiveness of its voluntary program nor has the state demonstrated a commitment to use its back-up enforcement authority to ensure inspections, when needed.

Other commenters were not supportive of Oregon's voluntary approach at all. They felt the state needed to require routine inspections and have more direct enforcement authorities. They noted Oregon's OSDS management program was not sufficient for meeting water quality standards and that enforcement action was minimal for existing leaking septic systems. One commenter noted that Dunes City passed an OSDS ordinance to require routine inspections because previous voluntary approaches did not work. Another commenter was concerned about several communities (Lane County and the City of Florence) allowing septic systems to be cited near lakes.

*Source: 11-B, 12-B, 13-B, 15-G, 34-B, 34-5, 35-E, 48-A, 48-K*

**Response:**

### B. More Needed to Improve OSDS Management

**Comment:** A few commenters noted specific actions Oregon needs to take before NOAA and EPA approve the state's programs for meeting the OSDS management measure. Actions include: siting OSDS in locations where they are properly separated from groundwater; restricting system density to reduce nitrate input to groundwater; ensure proper sizing of the system to minimize concentrations of contaminants and prevent hydraulic overloading; requiring mandatory inspections every 3-5 years or at the time of property transfer; requiring mandatory pumping after each inspection whenever needed; establishing a step-by-step program for the state to help homeowners with grants and low-cost loans that need support for pumping or replacing failing systems; and establishing explicit enforcement mechanisms.

*Source: 34-E, 48-J, 78-E*

**Response:**

### C. Concerned with Sewage Discharge to Waterways During Rain Events

**Comment:** One commenter noted that some communities, such as Myrtle Point and Powers, discharge sewage during rain events, preventing shellfish harvest.

*Source: 17-B*

**Response:**

## IX. FORESTRY

### A. Impacts of Forestry Industry

**Comment:** NOAA and EPA received mixed comments on its finding that Oregon failed to submit adequate management measures for forestry. Majority of commenters agreed that existing forest practices do not adequately prevent impacts to water quality or designated beneficial uses (e.g. fish spawning, migration, etc.) and additional management measures are needed. Commenters raised various issues associated with the forest industry. Impacts from clear cutting practices were described as contributing to water quality degradation and landslides. A few commenters discussed their concerns with impacts from logging and clear cutting and provided specific examples of impacts that result from forest roads contributing sediment to streams, landslides from clear cutting, inadequate buffers along streams, and the loss of fish spawning habitat. One commenter pointed out the adverse effects of pesticides on amphibians and crawfish in non-fish bearing streams. While another noted the effects of logging on restoration efforts of the Coho Salmon, citing a NOAA opinion for a potential ESA delisting of Coho Salmon.

*Source: 57-F, 57-I, 63-B, 67-E, 67-F, 67-G, 70-C, 75-F*

#### Response:

### B. General Effectiveness of Existing Forest Practices and Programs

**Comment:** Many commenters argued that current land use laws and the Forest Practices Act do not provide sufficient protection of Oregon streams and additional management measures for forest practices are necessary to have an approvable program under CZARA. Some commenters contend that the FPA is inconsistent with water quality standards and CZARA and the Oregon Department of Environmental Quality has failed to use its authority to address these inconsistencies. It was also noted that the lack of political will along with state tax benefits to timber industry contribute to the lack of resources state agencies have to improve degraded water quality. One commenter noted that compliance with forest practices regulations is not equal to compliance with water quality standards, and in most cases, enforcement occurs only after water quality damage has already occurred. Another commenter recommended NOAA and EPA EPA to review additional studies and reports to give the federal agencies a full appreciation for the water quality impacts of industrial forestry and associated road impacts in coastal watershed (See pg. 10-11 of public comment for list of recommended sources <http://coastalmanagement.noaa.gov/nonpoint/oregonDocket/publicComments58ow.pdf>).

Conversely, a few commenters have argued that existing programs regulating forest practices are consistent with CZARA and that no additional management measures are needed. It was contended that the FPA adequately protects Oregon's watersheds and the Oregon CNP should be approved without conditions. It was noted that the FPA already requires BMP monitoring including pesticide use monitoring, and landslides and public safety monitoring. And based on monitoring results, forest practice rules have evolved and improved over time. One commenter argued that both EPA and NOAA

have failed to show that Oregon's forest practices rules do not meet water quality and beneficial use objectives; on the contrary, a "large body of science" demonstrates that Oregon forest practices have a "neutral to positive" effect on aquatic life.

*Source: 35-I, 57-D, 57-E, 57-F, 57-G, 57-H, 57-S, 57-V, 57-W, 70-C, 75-E, 75-G, 77-F, 77-G, 79-B, 79-C*

**Response:**

### **C. Adequacy of Forest Practices Act to Satisfy CZARA Requirements**

**Comment:** One group commented that Oregon's Forest Practices Act "establishes a dynamic program that responds promptly and deliberately to environmental issues as they arise..." The group cited sections of the FPA related to forest practices and water quality. It pointed out that the FPA requires that water resources, including drinking water, be maintained and that BMPs be established as necessary to insure maintenance of water quality standards. The commenter contends that the language of this FPA provision adheres to the CZARA requirement that additional management measures be established to maintain applicable water quality standards. The commenter also noted that the FPA already requires BMP monitoring including pesticide use monitoring, and landslides and public safety monitoring. And based on monitoring results, forest practice rules have evolved and improved over time. The commenter argued that while NOAA and EPA have expressed their concerns about forest roads delivering sediment into streams, they have not cited any sources supporting these concerns.

*Source: 77-F, 77-G, 77-M*

**Response:**

### **D. Importance of Forestry Riparian Management**

**Comment:** Many commenters were generally in agreement about the importance of forestry riparian management for addressing erosion and water quality problems they believed were exasperated by lack of adequate riparian buffers along coastal watersheds. One commenter expressed the concern that "large companies with large land holdings" were conducting "dangerous activities" that impact people, wildlife habitats and water quality in the state. The commenter added that such activities required oversight from laws that limit pollution being released into waterways. Another commenter pointed out that habitat and water quality indicators overlap and contended that there was a need to fully examine how physical habitat and water quality are interconnected. The commenter added that because "streams form a linked network, water quality and stream health is closely associated with the intensity and cumulative extent of forest management activities near streams of all sizes, in all parts of the network", and noted that "approximately 55% of the 27,000 stream miles examined in Oregon were either severely or moderately impacted by nonpoint source pollution."

The commenters touted a variety of benefits to riparian buffers. A few commenters emphasized the negative impacts that occur due to clear cutting and not providing sufficient riparian buffers, such as increased soil erosion, and lack of pesticide filtration. For example, one commenter sited degraded lakes within the Sutton, Mercer, Woahink, and Siltcoos watersheds where clear cutting to the shores has occurred. Other commenters discussed the effects of winter blow downs where "strong coastal winds



accelerate through the clear cuts and abruptly hit the buffers with great force.” Narrow, inadequate buffers are not able to stand up to these winds, and trees are knocked down, leaving nothing to hold the soil in place which ultimately runoffs and impacts the creeks.

Commenters also pointed out the importance of riparian buffers in maintaining large woody debris (LWD). They stated large wood recruitment is essential to maintain biological and hydrological processes in streams (e.g., sediment retention and transport, habitat formation, substrate for biological activity) and is critical for salmonid populations. A commenter described how in a natural stream/riparian system, large wood is recruited from areas adjacent to streams and upslope, including unstable areas that move down toward streams. Moreover, the commenter noted that large wood was not just needed instream but also adjacent to the stream and discussed the role of Conifers and the importance of regeneration rates of conifers in the future. Another commenter noted that older forests and intact riparian areas, as well as large shifting beaver complexes have contributed to greater amounts of LWD in streams which has helped to maintain floodplains, habitat complexity, hyporheic flow, and hydrologic stability. However, the commenter explained, management of coastal lands has resulted in chronic and persistent disturbance and bare riparian areas along the lower reaches of coastal streams. This has led to low LWD, unstable banks, and high energy channels.

Other commenters explained the importance of riparian buffers for controlling sedimentation into streams. A commenter pointed out that if riparian buffers are not required for non-fish bearing streams (headwaters), those streams become a source of excess sediment to networked fish-bearing channels as sediment is transported downstream, essentially decreasing or eliminating the effectiveness of riparian management zones in maintaining low turbidity at a watershed scale. The commenter also described that erosion and sedimentation contributes to losses in channel depth, the frequency and quality of pools, and off-channel habitat critical for fish rearing. Another commenter noted the constant need for regular dredging of the port of Brandon and other coastal facilities due to siltation caused by erosional riparian areas.

In addition, commenters stated that increased sediment delivery and lack of LWD recruitment also impacts designated uses, such as salmonids and drinking water. Commenters explained how increased sedimentation contributes to increased levels of fine sediment, increased turbidity that can impair salmonid sight feeding and cause gill damage. A commenter also discussed how increased sediment delivery can even cause increased water temperatures in the absence shade loss. Others pointed out the importance of forest riparian buffers for maintaining healthy drinking water by filtering sediments, pesticides, and other pollutants from the water. One commenter noted that even where narrow buffers exist along river shores (e.g., the Siletz River), there are places where the forest buffer has been eliminated completely and streams that flow into the Siletz have no buffer zone at all.

Finally, a commenter also stated that large stream buffers play an important role in storing additional carbon and reduce greenhouse gas emissions.

*Sources: 15-E-1, 15-F-1, 15-F-2, 28-B-1, 30-K-1, 35-J-1, 42-D-2, 45-AAA, 56-D-1, 56-D-2, 57-BBB, 57-DDD, 57-EEE, 58-B-1, 58-E-1, 58-E-3, 58-E-4, 58-H-2, 58-H-6, 75-I*

**Response:**

#### **E. Forestry Riparian Management Accomplishments**

**Comment:** Speaking to the accomplishments of Oregon's coastal nonpoint program as it relates to forestry-riparian management, commenters emphasized their support for Oregon's existing rules and programs in place to manage the forest industry and maintain water quality and riparian protections. One commenter pointed out that Oregon's Department of Forestry works to strengthen forest rules for riparian protection but faces political challenges that require "thoughtful science". The commenter noted the importance of maintaining the forest industry's support for water quality protection and acknowledged this process will take longer than Spring 2014.

Another commenter, on behalf of various groups, noted that private landowners, foresters, and loggers all support the Oregon Forest Practices Act and believe application of its rules is high. Another group called attention to Oregon's fifteen plus years of "superior voluntary riparian watershed enhancement accomplishments" by the forest sector and contended that EPA and NOAA's restrictions would "stifle these valuable watershed improvements". Lastly, another group noted how Oregon's Department of Forestry has been doing good work to improve water quality and riparian habitat.

*Sources: 14-D, 77-AAA, 79-D, 82-B*

#### **Response:**

#### **F. Adequacy of Forestry Riparian Management for Protecting Small, Medium Fish-Bearing Streams and Non Fish-Bearing Streams**

**Comment:** Many commenters expressed the opinion that Oregon's existing riparian management practices and forestry laws were inadequate for protecting small and medium fish-bearing and non-fish bearing streams. When required, buffer requirements are minimal (e.g., 20 feet) and Oregon lacks buffer requirements for non-fish bearing streams altogether. One commenter reasoned that because riparian buffers are not required for non-fish bearing streams, they become a source of sediment to connected fish-bearing channels thus compromising the effectiveness of the overall system of riparian management in maintaining sufficiently low turbidity.

Commenters stated that the Oregon Forest Practices Act and other comparable forest practices have been widely criticized for failing to protect water quality and salmonid habitat (examples provided of such failures related to inadequate shade, poor large wood recruitment, lack of tributary protection, and unstable slopes). They also stated that Oregon's forestry riparian protection standards lagged behind those of their neighboring states, such as Washington and California. Commenters pointed to the National Marine Fisheries Services' determination that the Oregon Forestry Practices Act did not have rules in place to adequately protect coho salmon habitat. Commenters opined that the FPA did not provide for the production and introduction of necessary large woody debris to medium, small, and non-fish bearing streams and any required buffers under the rules were inadequate for preventing significant warming of streams.

A white paper analyzing the proposed O&C Trust and the Conservation and Jobs Act was noted as providing evidence of support for the need of more stringent programs to protect water quality in Oregon's coastal zone. A concern was raised that even where narrow buffer zones exist along river shores there were areas where those buffers were eliminated completely. The claim was also made that

the Board of Forestry has not shown any intent to provide riparian protection for non-fish bearing streams, which were believed to make up the majority of coastal stream miles and flow into fish bearing streams.

A commenter discussed how restoring and maintaining productive aquatic habitat did not appear to be a common stated objective of Oregon programs that influence the management and use of riparian areas and it appeared that riparian corridors have been significantly degraded across large portions of the state's landscape. Other comments pointed to the 1999 RipStream study findings as evidence that the existing FPA buffers are not in compliance with water quality standards and the Clean Water Act. They stated that riparian management on private lands has not improved since.

Other comments pointed out other weaknesses in Oregon's existing FPA rules. For example, the rules do not protect non-perennial, or intermittent, streams, which are determined "by the State Forester based on a reasonable expectation that the stream will have summer surface flow after July 15." In addition, the commenter raised issue with the lack of required riparian management for seeps and springs as well.

On the other hand, a couple of commenters believed Oregon's existing Forest Practices Act and rules, combined with its voluntary efforts, were adequate for protecting forestry riparian areas. One commenter stated the Forest Practices Act and rules do provide the minimum requirement for developing large mature trees that can contribute wood debris to streams. They also asserted that voluntary efforts, such as discretionary placement of additional wood in the stream, help to further create large wood debris habitat that salmon need. In addition, they discussed other new voluntary practices are being implemented well among the forest industry, such as the retention of additional leave trees in near-stream areas, and targeted restoration of high-priority riparian areas that are lacking woody debris.

These commenters cited results from several recent Watershed Research Cooperative (WRC) studies to support their position that Oregon's existing forestry riparian management was adequate. For example, they state that two of the three WRC studies indicate a positive fish response following timber harvesting and that the Hinkle Creek WRC study found that small debris provides shade to non-fish bearing streams.

In addition, a couple of commenters chastised NOAA and EPA for relying on much older studies, such as ODF's 1999 RipStream study and the 2002 ODF and DEQ Sufficiency Analysis, to support the federal agencies' claim that Oregon's needed greater protection of small, medium fish-bearing streams and non-fish bearing streams. They stated NOAA and EPA should have considered newer, more relevant research, such as the WRC studies. In addition, one commenter felt NOAA and EPA misinterpreted the RipStream study findings. They believed NOAA and EPA's description of the study's findings on page 8 in the proposed decision document did not align with the actual conclusions of the report.

One commenter also reflected that the criticism of the existing FPA and rules should be tempered against the evolving science and understanding of forestry riparian management. They site how former thinking that clean wood placement in streams was needed to improve instream fish habitat and increase dissolved oxygen, has now evolved to an understanding that large woody debris is needed to achieve these goals. In addition, the commenter states that while there used to be an emphasis on retaining large conifers along streams, that thinking has now shifted to reflect a new understanding of

the benefits of riparian hardwoods as well and the importance of diversity in tree species within the riparian zone.

*Sources: 15-G-2, 28-B-1, 30-K-1, 43-BBB, 55-P, 56-D-2, 56-E-1, 56-E-2, 56-E-3, 57-AAA, 57-BBB, 58-E-2, 58-H-1, 58-H-3, 58-H-4, 58-H-5, 67-D1, 67-D-2, 75-H, 77-H, 77-I, 77-BBB, 77-CCC, 77-DDD, 79-E, 79-G*

**Response:**

**G. Greater Protection of Forestry Riparian Protection Needed**

**Comment:** Several commenters stated that Oregon needs to provide greater protection for forestry riparian areas along both fish and non-fish bearing streams. One commenter provided several examples of recommended buffer widths that the state may wish to adopt. For example, they mentioned that NMFS recommends no-cut riparian buffers ranging from 150-300 feet in width to protect salmonids. The larger buffer widths are for fish-bearing streams, while the smaller widths are more suitable for non-fish bearing streams. The commenter also stated the Northwest Forest Plan recommends similar buffer widths (300 foot no-cut buffers along fish-bearing streams and 150 foot no-cut buffers along non-fish bearing streams). The commenters stated that wider riparian buffers would ensure large wood recruitment, improve sediment and pesticide filtration, and provide sufficient tree basal area within the riparian zone to shade streams and protect cold water needed for salmon. As one commenter also asserted, the larger buffers would also provide greater protection from blow downs and ensure that if a few trees are blown down, enough would remain to still provide a functioning buffer.

In addition to greater protection of forestry riparian areas, commenters stated that riparian restoration was needed. They highlighted the important role large downed trees, or nurse trees, play in forest regeneration.

One commenter did express concern with adopting riparian buffers similar to the Northwest Forest Plan. They stated that when the Bureau of Land Management adopted the plan's buffers, it limited the amount of timber that could be harvested. The new buffer requirements necessitated three landings and two more harvest units to harvest the same amount of timber that used to be done with one landing before. Therefore, as the commenter stated, more restrictive riparian buffers leads to greater ground disturbance.

*Sources: 20-B-1, 30-K-1, 48-I, 55-N, 56-E, 56-E-1, 56-E-2, 57-E-3, 58-E-4*

**Response:**

**H. Impacts of Strict Forestry Riparian Protection**

**Comment:** A couple of commenters expressed concern about the impacts stricter riparian management would have on forestry operations. One commenter felt requirements for larger riparian buffer widths would only hurt the logging industry and drive up the price of lumber. Another commenter stated that any EPA and NOAA-proposed restrictions would limit the ability of private forest landowners to invest in watershed restoration efforts, including enhancements to forestry riparian areas. They felt additional

restrictions would smother the forest sector's cooperative stewardship ethic and long-history of voluntarily adopting good riparian management and other forest stewardship practices.

*Sources: 20-B, 79-D, 79-F*

**Response:**

#### **I. Flexibility for Forestry Riparian Management Needed, Including Use of Voluntary, Incentive-Based Approaches**

**Comment:** Rather than relying on strict regulatory approaches to better protect riparian areas on forest land, a few commenters advocated for more flexible, voluntary, and incentive-based approaches. The commenters recognized more could be done to protect riparian buffers, and thus water quality, salmon and other designated uses. However, they felt additional incentive-based approaches, combined with the existing Forest Practices Act rules, would be the best way to provide these additional protections and facilitate long-term wood recruitment and shade to support high-quality salmon habitat. Voluntary practices they recommended included the retention of additional leave trees near fish-bearing streams, the placement of large woody debris in streams, planting trees and other carrying out other activities to restore riparian areas, and thinning riparian forests to levels that promote primary production in streams and the adjacent understory (primary production being important for salmon populations).

*Sources: 75-F, 77-CCC, 79-D, 79-F*

**Response:**

#### **J. Forestry Landslide Management**

**Comment:** Some commenters acknowledged that landslides caused by logging practices such as clear cutting are a real problem in Oregon and additional management measures are necessary to address these impacts. It was noted that Oregon does not have sufficient programs in place to control non-point pollution from forestry practices, particularly due to logging on private lands.

Others expressed their disagreement with the federal agencies' recent decision and argued that the evidence provided by the federal entities was misleading, only focusing on "landslide density relationships" rather than considering the "total number of landslides triggered during major storms". If consider the latter, one would see that the "potential increases in sediment delivery to public resources from landslides...is proportionally small". In addition, it was argued that EPA has not offered objective evidence that additional management measures are needed to maintain water quality. It was recommended that EPA consider a broader scale view over longer timeframes to evaluate whether water quality and designated uses are impaired. The commenter added that the federal agencies have not produced any evidence that landslides resulting from forest management activities have caused exceedances in water quality or negatively impacted aquatic life.

*Source: 61-A, 63-B, 67-B, 77-J, 77-K, 77-L*

**Response:**

#### K. Forestry Road Management

**Comment:** One group commented that there is no program in place to control non-point pollution sufficiently to meet CZARA and management measures are needed to maintain water quality and protect designated beneficial uses due to logging impacts. Examples of logging roads and associated impacts to watersheds and habitat were noted by various commenters. Speaking to current forest practice rules, another group commented that “generic BMPs” are imposed and are not backed by relevant water quality data and so fail at protecting water quality and beneficial uses. The group added that existing rules for forest roads are vague and prioritize logging over protection of water quality. One argument stated that Oregon’s road location rule, which only requires operators to minimize risk to streams rather than requiring them to avoid water quality problems, is not sufficient. Other examples given demonstrating the inadequacies of the current forest practices rules include how they are not designed to eliminate delivery of fine sediment or to ensure that delivery does not impair water quality and they do not require that existing, inactive logging roads or “legacy roads” be brought into compliance with water quality standards.

Another group made the argument that while NOAA and EPA have expressed their concerns about forest roads delivering sediment into streams and have requested that the state enact an inventory and reporting program for forest roads, they have not cited any sources supporting these concerns and have presented no basis for the request. The commenter contends that new rule revisions (2002 – 2003) and success under the Oregon Plan for Salmon and Watersheds were detailed in the State’s submission and are evidence that the Oregon Forest Practices Act is working as it should and the Board of Forestry is committed to implement additional management measures for forestry roads as needed. They also note that salmon stocks are recovering.

*Source: 57-D, 57-I, 57-N, 57-O, 57-P, 57-R, 57-T, 57-U, 67-B, 75-D, 77-M, 77-N, 77-O, 77-P, 77-Q, 77-P, 77-Q*

**Response:**

#### L. Forestry Pesticides Management

**Comment:** Many commenters voiced concerns about pesticide and herbicide use associated with the forest industry in Oregon, especially using aerial spraying as a method of applying these chemicals. Adverse impacts to drinking water sources, designated uses, and habitats were among the list of issues commenters raised. Stories of chemicals used in forest practices found in local streams and in state residents were reported. Some believe that Oregon coastal watersheds are not adequately protected from pesticides and herbicides. A few noted that existing buffers are ineffective including existing no-spray buffers around fish-bearing streams, which are considered to be too small and non-fish bearing streams are not protected at all. One commenter suggested a pesticide-free buffer around certain land uses such as schools. One commenter discussed how certain herbicide chemical properties allow for them to persist in the environment and are eventually carried downstream to fish. It was noted that not enough is known about the interactions of chemicals when mixed. Moreover, it was expressed that additional research is needed to determine if aerial spraying of herbicides in forest industry is a necessary method of application.

Several commenters cited specific studies or personal observations to support their statements. For example, one commenter referenced a report, *Oregon's Industrial Forests and Herbicide Use: A Case Study of Risk to People, Drinking Water and Salmon*, to explain how "private forestry operations in Oregon operate under antiquated and loose regulations, allowing aerial spraying and unmonitored applications of pesticides as compared to their federal forestry operation and border-state counterparts." They listed specific findings from the report including: (1) There are known endocrine disrupting chemicals entering Oregon's drinking water sources and fish-bearing streams; (2) Oregon does not require a no-spray buffer near homes and schools; (3) Aerial herbicide sprays regularly occur directly over headwaters and tributaries of protected salmon streams; (4) Oregon permits pesticides to be sprayed with only the smallest protective buffer of 60 feet from salmon and steelhead streams—a buffer significantly smaller than other Northwest states with similar forest and river ecosystems; (5) Stricter chemical and pesticide rules apply in neighboring states with heavy forestry industries; (6) Under the current administrative rules, the Oregon Forest Practices Act prohibits researchers, doctors and the public from obtaining accurate information about what types and quantities of herbicides are sprayed.

However, other commenters contended that existing water quality monitoring activities for non-fish bearing streams during and after spraying herbicides has shown no "detrimental impacts" and Oregon continues to support monitoring that would identify potential problems if any arise. The commenter added that there have been changes over the years in chemical labeling and how chemicals are applied to forests. The commenter pointed out that pesticide applicators are licensed and, along with landowners, are already subject to stringent regulations and guidelines under the FPA and FIFRA.

Source: 62-B, 62-C, 69-C, 70-C, 70-D, 70-E, 70-G, 70-J, 72-B, 75-C, 76-A, 76-C, 77-R, 77-S, 77-T, 85-D, 85-E

**Response:**

**M. Inadequate Forestry Pesticide Monitoring**

**Comment:** In addition to their general concern about pesticide use by the forest industry and inadequate riparian buffers when pesticides are applied, several commenters expressed their concern about the inadequacy of the Oregon's water quality monitoring efforts following aerial application of pesticides and herbicides on forestry lands. One commenter stated Oregon has no program to determine the presence of forestry pesticides in the air and resulting in drift and deposition onto surface waters and soils. Commenters gave many examples of how they believe drinking water, human health, and fish and wildlife have been impaired by aerial spraying.

One commenter noted without effective monitoring protocols, the state lacks data to prove aerial application was a problem and improvements were needed. For example, one commenter stated there was no monitoring of aerial drift even though the Oregon Health Administration said chemicals could drift two to four miles. Another commenter also noted there was little to no coordination between DEQ and ODF on pesticide monitoring. One commenter also questioned NOAA and EPA's praise of Oregon's Water Quality Pesticide Management Plan. They noted that while the state purportedly uses water monitoring data to develop adaptive management approaches, the state actually undertakes very little pesticide monitoring and that there is no evidence the state collects any data in coastal watersheds.

It was pointed out that while NOAA and EPA found state-level frameworks and actions sufficient for addressing pesticide water quality controls, none of the pilot monitoring programs supporting this

finding occur in the coastal zone. A commenter also added that the agencies “improperly assume that, should riparian buffer standards for type N streams and monitoring programs within the coastal zone adhere to existing state laws and programs concerning water quality and pesticides, then Oregon’s CNPCP would warrant approval.” The commenter contended that existing state and federal laws do not sufficiently address a large portion of pesticide application activities and do not collect necessary pesticide application and risk data. Referring to Oregon’s Water Quality Pesticide Management Plan, which has a component that relies on monitoring data, a commenter noted that the state does little monitoring of pesticides and there is no indication of data being collected in coastal watersheds.

*Source: 30-R, 42-G, 42-H, 46-H, 49-I, 57-II, 70-F*

**Response:**

#### **N. Forestry Clear Cuts**

**Comment:** Commenters expressed their concerns with the clear cutting practice associated with the logging industry. They disagreed with the amount of clear cutting that occurs, including the FPA rule, which allows up to 120 acres. The point was made that the rule did not consider cumulative impacts. Commenters discussed the impacts to water quality associated with clear cutting, particularly when combined with a lack of riparian buffers and sprays. In addition, the problem of clear cutting on steep, erosional slopes, which contributes to landslide problems and further impacts water quality. One commenter argued that clear cutting is not sustainable and Oregon needs to practice sustainable forestry. Commenters provided examples of impacts resulting from clear cutting including extensive clear cutting that has occurred in riparian areas around watersheds, including waterways that provide drinking water, despite having steep slopes and erosive soils; and clear cutting that has occurred in areas with designated spotted owl sites and high risk areas.

*Source: 12-A, 40-A, 42-D, 43-D, 53-F, 75-B, 75-C, 75-D,*

**Response:**

### **X. AGRICULTURE**

#### **A. Ability of Oregon’s Agricultural Programs to Meet CZARA Requirements**

**Comment:** Some commenters noted that they did not believe Oregon had satisfied the CZARA requirements for Agriculture and the conditions related to the agriculture management measures that NOAA and EPA placed on Oregon’s Coastal Nonpoint Program. They noted that Oregon must address impacts caused by polluted runoff from agricultural activities. Various points were made about the inadequacy of the management approaches and programs the state relies on to meet the CZARA requirements (see additional comments related to agriculture below for detailed examples).

Other commenters felt that the State had satisfied the CZARA agriculture management measure requirements and the conditions placed on its program related to agriculture (see additional comments



related to agriculture for detailed examples). They stated that finding otherwise would be unreasonable and contrary to CZARA requirements. It would also hold Oregon to a higher standard than other states. Some commenters also contended that if NOAA and EPA find that the State has not submitted an approvable program for agriculture, that decision would punish the agriculture community; they would lose important federal funding that help reduce polluted runoff from agricultural activities.

*Source: 5-B, 13-C, 19-C, 44-F, 47-B, 49-G, 56-J, 60-A, 64-A, 64-C, 65-F, 66-A, 66-C, 66-A, 68-C, 71, 84-B*

**Response:**

**Main Points to Highlight?**

- After careful consideration of all comments, the State's March 2014 submittal, and other information, NOAA and EPA have concluded \_\_\_\_\_.
- State what our decision is and why we feel that way (or just refer to rationale in decision doc if that will provide sufficient explanation).

**B. Extent of Nonpoint Source Pollution from Agriculture**

**Comment:** Several commenters questioned NOAA and EPA's claim in the proposed decision rationale that nonpoint source problems from agriculture are widespread. Commenters stated that agriculture was not the predominant land use within the coastal nonpoint management area. Two different commenters provided statistics on the extent of agricultural land within the coastal nonpoint management area to support this claim. While they presented slightly different statistics (i.e., agriculture land represents only five percent of land use in the coastal zone with pasture/hay use the predominant land use versus 25 percent of land within the coastal nonpoint program area is agriculture but less than one percent of those agricultural lands are used for activities other than pasture/hay) they arrived at the same conclusion. Given that agricultural land comprises a small overall land area and that most of these agricultural lands are used for pasture or hay, potential water quality impacts from agriculture are reduced since there is little opportunity for soil disturbance or nutrient loading from traditional row crops. They contended that most ambient water quality monitoring reports indicate "fair to excellent water quality" and monitoring sites with poor conditions are not due to agricultural activities.

The same commenters did not feel that NOAA and EPA supported their statement in the proposed decision document that water quality impacts from agriculture were widespread. They found fault with NOAA and EPA's sole reliance on NOAA National Marine Fisheries Services' (NMFS) recent listings for coho salmon and draft recovery plans (both under the Endangered Species Act). One commenter stated that the draft salmon listings and recovery plan findings are based on opinion and anecdotal evidence and are unsupported by scientific fact. Therefore, they requested that NOAA and EPA's references to the coho salmon listings and recovery plan findings as they relate to agriculture impacts to water quality be removed. Another commenter stated that NMFS's listings and plans did not support a conclusion that water quality or designated use impairments due to agriculture are "widespread." For example, the commenter reflected that the NMFS documents do not specify which land use(s) require greater buffers to adequately protect coho salmon.

However, other commenters noted that polluted runoff from agricultural activities was a significant concern and contributed to water quality degradation. They noted that Oregon must address nonpoint source pollution impacts from agriculture. (See also response to “Effectiveness of Oregon’s Agriculture Programs for Achieving Water Quality Standards and Protecting Designated Uses” comment.)

*Source: 13-C, 19C, 64-H, 66-H, 68-H, 70-O, 71-B, 71-F, 71-M, 84-C, 84-G*

**Response:**

**Main Points to Highlight?**

- What we believe the science says about the significance of ag runoff/how widespread ag NPS problem is in the coastal mgmt area. Cite specific studies to support statements.
- Refute claims about inadequacy of NMFS reports?
- Note that we have revised the ag decision rationale to provide additional support for NOAA and EPA’s statements about the extent of ag pollution.

**C. Effectiveness of Oregon’s Agriculture Programs to Achieve Water Quality Standards and Protect Designated Uses**

**Comment:** Several commenters expressed concern that the approaches Oregon relies on to meet the CZARA agriculture management measure requirements were not sufficient to achieve water quality standards and protect designated uses. For example, several commenters stated that the Agriculture Water Quality Management Area (AWQMA) rules were too vague to ensure water quality standards are achieved. Another commenter called out Oregon’s pesticide management practices as being inadequate to meet water quality standards. One commenter stated that ODA publicly acknowledged that even 100 percent landowner compliance with the current AWQMA rules was not sufficient for achieving water quality standards. The commenters concluded that it was important for the state to include agriculture management measures that enable the state to achieve and maintain water quality standards.

Commenters provided several examples of why they believe Oregon’s agriculture programs are unable to meet water quality standards and designated uses. One commenter mentioned that Tillamook Bay was closed to shellfish harvesting for 100 days of the year due to polluted runoff from dairy farms. Another commenter stated that Oregon’s Water Use Basin Program failed to maintain minimum water flows, which resulted in impairments to water quality and habitat needed for sensitive and endangered species.

Several other commenters, however, stated that Oregon has developed water quality standards designed to protect designated uses (including coho salmon and other endangered or threatened fish species) and that Oregon’s agriculture programs, including the AWQMA Program, are designed to ensure agriculture activities do not prevent the State from achieving those water quality standards and protecting species. One commenter cited excerpts from the North Coast Basin AWQMA rule that state, among other things: “No person conducting agricultural land management shall cause pollution of any waters of the state or place or cause to be placed any wastes in a location where such wastes are likely to escape or be carried into the waters of the state by any means (ORS 468B.025(1)(a)).” and “ No person conducting agricultural land management shall discharge any wastes into the waters of the state

if the discharge reduces the quality of such waters below the water quality standards establish.” (OAR 603-095-0840)

*Source: 46-H, 57-AA, 57-GG, 57-NN, 65-G, 66-E, 71-N, 78-F, 78-G, 83-G, 84-B*

**Response:**

**D. Effectiveness of the Agriculture Water Quality Management Area Program and Plans for Meeting the CZARA Management Measures**

**Comment:** Several commenters expressed concern with Oregon’s reliance on the Agriculture Water Quality Management Area (AWQMA) Program to meet the CZARA management measures and address polluted runoff. However, other commenters were supportive of the program and thought it did enable the state to meet its CZARA agriculture requirements.

Commenters who believed the AWQMA Program did not satisfy the CZARA requirements were concerned that the AWQMA plans, which include the CZARA management measures for agriculture in their appendices, are voluntary. One comment cited Oregon statute and rules that state: “The rules adopted under this subsection shall constitute the only enforceable aspects of a water quality management plan” (ORS 568.912(1)) and “Area rules are the only enforceable aspect of an AWQMA plan” (OAR 603-090-000(4)). The commenters were concerned that the AWQMA rules, which provide ODA with enforcement authority for the program, do not include specific requirements consistent with the CZARA 6217(g) management measures that adequately protect water quality. They believed the AWQMA Program was not sufficient for meeting CZARA requirements because management measures must be backed by enforceable authority under CZARA. The CZARA management measures in the appendix of the voluntary plans are not enforceable.

A few commenters who participated in AWQMA planning efforts for several different coastal basins cited personal observations that supported their conclusions that the voluntary AWQMA plans lacked specific requirements to adequately protect water quality. One participant with the Mid-Coast Basin described how the planning team rejected including more specific protections for riparian buffers even though they were aware that water quality problems in the basin, such as temperature increases and bacteria contamination from livestock, were created or being exacerbated because riparian vegetation was inadequate. Another commenter who had experience with the Inland Rogue AWQMA plan stated that what was deemed an inappropriate land use practice was subjective because the plan and rules lacked specific thresholds for what was or was not an inappropriate activity.

One commenter was also concerned that ODA does not have an implementation plan, with interim milestones and timeline, in place to ensure the voluntary actions in the plans occur. Another commenter also called out the State’s inability to point to significant achievements of the AWQMA Program to improve agriculture land use practices that have caused or contributed to water quality impairments. They believed that since the AWQMA plans and rules have been in place since 2007, the State should have more to show for the program by now if it was actually achieving its goals to protect and improve water quality.

Several other commenters had a different perspective. They felt that the AWQMA Program does enable Oregon to satisfy the CZARA agriculture management measures and the conditions related to agriculture

that NOAA and EPA placed on its coastal nonpoint program. One commenter contended that the AWQMA plans and rules exceed CZARA requirements. The commenters stated the coastal AWQMA plans directly reference the CZARA management measures and that ODA has the authority to require the CZARA management measures and to impose additional measures, if necessary. They believed the AWQMA plans and rules provide sufficient goals, policies, and authorities, to improve water quality within coastal watersheds.

One commenter stated that the AWQMA Program includes many practices that are consistent with (or exceed) the CZARA management measures. For example, the plans and rules ensure animal wastes are placed to avoid impacts to water quality, site capable riparian vegetation is in place to reduce erosion, strict nutrient limits are established for waterways, and livestock access to waterways is limited to protect water quality and streambanks.

A few commenters objected to claims by others that the AWQMA plans and rules do not provide specific practices or requirements, such as set buffer widths. They claimed mandating such specific requirements be included in the plans or rules would be applying a “one-size-fits-all” approach which is contrary to the inherent flexibility CZARA affords. One commenter also stated that neither CZARA nor the 6217(g) guidance prescribes specific agricultural practices through the CZARA management measures.

Some commenters, who included several farmers, described how ODA works with ranchers and farmers to modify, reduce, and remove ineffective agriculture practices. They stated that farmers have worked hard to meet or exceed water quality standards by working with the State to develop AWQMA plans to set watershed goals and prioritize investments to enhance water quality. Farmers noted that they willingly participated in the AWQMA Program and voluntary programs because they had the understanding that the program and their voluntary efforts would meet all federal and state regulatory requirements for agriculture.

Commenters also noted the success of the state’s AWQMA Program and voluntary efforts over the years. For example, one commenter stated between 1998-2012, the Oregon Watershed Enhancement Board (OWEB) contributed nearly \$18 million to support coastal agriculture projects and Soil and Water Conservation Districts and landowners provided an additional \$5 million in-kind support. These efforts restored over 950 linear stream miles and improved agricultural practices that impacted over 2,750 acres of farmland. In addition, the commenter also stated, that landowners voluntarily enrolled thousands of acres of farmland in federal programs designed to improve water quality.

*Source: 55-E, 56-J, 57-CC, 57-EE, 64-C, 64-F, 65-B, 65-C, 65-D, 65-E, 65-F, 66-C, 66-F, 68-C, 68-F, 71-A, 71-B, 71-C, 71-G, 71-K, 71-N, 71-P, 71-Q, 71-R, 72-A, 73-A, 78-H, 78-I, 78-K, 84-D, 84-I, 84-N, 84-O*

#### **Response I.2:**

#### **E. Need for Oregon’s Agriculture Programs to Have a Greater Focus on Prevention Rather than Rely on Addressing Water Quality Impairments After They Occur**

**Comment:** A few commenters asserted that the AWQMA Program and plans only focused on areas with known water quality impairments. They felt that the AWQMA Program did not provide sufficient

protection of more pristine areas to prevent them from becoming degraded. They stated by focusing on impairment rather than protection, ODA is allowing polluting practices to occur for many years until water quality becomes degraded and is documented through a TMDL. Commenters were also concerned that the AWQMA plans do not require restoration, especially pertaining to riparian buffers surrounding former agricultural sites. *(See also discussion under Agriculture-Buffer and Agriculture-Legacy Issues comments.)*

On the contrary, a few other commenters disagreed with NOAA and EPA's statement in the proposed decision rationale that AWQMA plans focused primarily on impaired areas. They stated that landowners are generally expected to protect water quality, not just impaired waters. They believed that ODA implements controls through the AWQMA Program to address sources of existing impairments as well as prevent polluted runoff elsewhere. One commenter provided a specific example of the North Coast Basin rules (OAR 603-095-0840) to illustrate how the standards address impaired areas as well as provide protection and restoration benefits. Another commenter also felt that ODA was coordinating well with DEQ to ensure continued integrity of the AWQMA Program and plans and ensure that landowners have the tools and adaptive approach to address polluted runoff.

Source: 46-H, 55-F, 80-I, 84-A, 84-D, 84-M, 84-P

**Response:**

**F. Effectiveness of Oregon Department of Agriculture's Enforcement of Agriculture Programs**

**Comment:** Several commenters stated they were concerned with ODA's lack of enforcement of its AWQMA rules and other agricultural rules. Other commenters did not believe there was an enforcement problem. They argued that CZARA does not require states to take specific enforcement action to receive approval. Rather, states only need to have management measures in place, backed by enforcement authority, which they believed Oregon has done.

Commenters that were concerned about enforcement of Oregon's agriculture programs believed Oregon's complaint-driven enforcement approach was not sufficient and that the state was not using its enforcement authorities when voluntary agriculture approaches fail to protect water quality. For example, one commenter, who is an agricultural landowner and a member of an AWQMA local advisory committee, discussed how the committee was informed that the AWQMA plan would be complaint driven and compliance was voluntary. The commenter questioned the effectiveness of this approach for protecting water quality and designated uses when ODA only issued three fines over the last eleven years.

One commenter felt ODA worked to protect the agriculture industry more than implement the authorities it has to protect water quality. As a result, enforcement was only taken for very egregious cases and even then, it proceeded slowly. Another commenter also stated how difficult it could be to get ODA to take action on a complaint since only signed complaints actually triggered an investigation. Another commenter asserted that polluted runoff from agriculture was difficult to control because most agricultural activities were exempted from the same Clean Water Act standards. Over all, these

commenters believed ODA's lax enforcement has allowed agriculture activities to continue to cause and contribute to water quality and designated use impairments.

In addition, one commenter also was concerned that ODA lacks an implementation plan to ensure that voluntary implementation of the AWQMA plans and other voluntary efforts occur. They noted that the implementation plan should include a proactive approach to enforcement (i.e., not rely entirely on a complaint-driven approach) and an enforcement response plan to ensure proper enforcement procedures and corrective actions are triggered when voluntary agricultural efforts are not being implemented or when voluntary approaches are not successfully protecting water quality.

Other commenters provided an opposing view. They argued that most agricultural landowners comply with existing water quality management rules and meet relevant CZARA requirements. They asserted that Oregon has a process in place to effectively address noncompliance issues and that ODA has the ability to enforce the AWQMA program and ensure compliance with water quality requirements.

They refute claims by others that few ODA enforcement actions over the years demonstrate that ODA does not have the ability and/or will to enforce the AWQMA program and ensure water quality is protected. On the contrary, the commenters noted that when a problem is identified, ODA first works closely with the noncompliant landowner to make necessary land use changes voluntarily before turning to enforcement. Therefore, they explained that most issues are corrected before a formal enforcement action is needed. Commenters also highlighted the existing review and monitoring processes ODA has enacted to track program "implementation and effectiveness". (See also discussion for "Agriculture-Monitoring and Tracking" comment.)

As noted above, they also contended that while CZARA requires the State and its agencies to have enforcement authority for the CZARA management measures. One commenter stated that CZARA does not require states to take a certain number of enforcement actions or meet a specific enforcement threshold. They believe that not only does ODA have suitable enforcement authority but the state's July 2013 coastal nonpoint program submission, which provided examples of several agriculture enforcement actions, demonstrates that ODA has used its authority to enforce the AWQMA rules, where necessary and appropriate.

*Source: 41-C, 46-H, 53-E, 54-K, 55-I, 55-D, 56-J, 56-K, 78-J, 80-F*

**Response:**

**G. Inadequacy of Oregon Water Resources Department's (OWRD) Water Use Basin Program for Meeting Irrigation Management Measure**

**Comment:** One group commented that the Oregon Water Resources Department's (OWRD's) Water Use Basin Program is inadequate for meeting CZARA requirements for agriculture. They suggested that NOAA and EPA were incorrect when finding that OWRD's Water Use Basin Program supports the irrigation measure and reiterated that Oregon's Basin Programs do not ensure that water quality and habitat for sensitive and endangered species will not be impaired. They urged EPA and NOAA to look closely at the deficiencies of the Basin Programs before attributing any water quality or fish habitat protection value to them as a measure in support of Oregon's agricultural conditions. They added that Oregon's rules provide no assurance that water use will be adequately limited to maintain minimum

flows and that the Basin Programs fail, in practice, to protect minimum perennial streamflows and instream rights held by OWRD for the protection of aquatic wildlife and water quality. They concluded that EPA should disapprove Oregon's agricultural measures and acknowledged the lack of protection offered by Oregon's Water Use Basin Programs for preservation of aquatic life and designated uses in the agencies' final determination.

*Source: 65-B, 65-C, 65-D, 65-E, 65-F, 65-G*

**Response:**

**H. Agriculture Riparian Buffers**

**Comment:** Various commenters noted the importance of, and need for, adequate agricultural riparian buffers along both fish and non-fish bearing streams. They stated the buffers were important to protect water quality, including cold water temperatures needed for the recovery and health of native salmon. The commenters felt that Oregon currently lacks appropriate riparian management practices for agriculture lands to help meet water quality standards and to protect coho salmon, amphibians, and drinking water. In addition, a commenter pointed out that ODA's remote sensing monitoring of riparian areas has shown little improvements in buffers despite implementation of the AWQMA Program and other agriculture programs.

Several commenters provided specific examples of Oregon's poor riparian buffer management. For example, several commenters contended that management measures in Oregon's agricultural plans are deficient to provide protection of stream banks, bank stability, and the destruction of riparian areas by livestock. They explained that stream banks are key to protecting water bodies from elevated sediment delivery that affects levels of turbidity and fine sediment in streams and eroding stream banks contribute to temperature increases, reduce large woody debris to streams, which is critical to salmonid recovery, and contribute to nutrient and pesticide delivery from upslope agricultural activities.

Another commenter spoke about their experience serving as an advisory member to the Mid-Coast Basin AWQMA Advisory Committee during its local area planning in 2009. They explained that when specific buffer proposals were presented to the committee, "All of the specific proposals for riparian protection were rejected by the committee, despite their knowledge of specific water quality problems in the basin created or exacerbated by inadequate riparian vegetation, including stream temperature problems and bacterial contamination from livestock."

A few commenters also discussed how the AWQMA rules do not require active restoration of suitable riparian vegetation. Rather the rules only prohibit agricultural activities from preventing the natural re-establishment of "site capable" riparian vegetation that often results in the establishment of invasive species, like blackberries, along the riparian zone that do not provide the same water quality protection and habitat value as native vegetation.

However, other commenters stated Oregon's current riparian management practices were sufficient for meeting CZARA requirements. Commenters asserted the AWQMA rule did provide for protection of riparian areas and stated that if a violation occurred, i.e. agricultural activities inhibit establishment of riparian vegetation, the livestock would have to be removed or managed appropriately. A commenter

provided an example of several North Coast Basin AWQMA rule requirements, such agriculture management activities must be conducted in a way to maintains stream bank integrity through 25-year storm events and minimize the degradation of established native vegetation while allowing for the presence of nonnative vegetation.

The commenter refuted others' claims that the "site capable" vegetation that the rules required was not effective at protecting water quality. They asserted that "site capable" vegetation plays an important role at filtering pesticides from runoff before it enters surface waters. Commenters also pointed out that farmers and ranchers implemented many practices to protect and restore riparian vegetation such as installed miles of piping for livestock watering, and planted and fenced many miles of stream banks. In addition, commenters stated that there is no requirement in CZARA or Section 6217(g) requiring specific riparian buffers on agricultural lands and that NOAA and EPA provided no concrete evidence in their proposed decision document to demonstrate why Oregon needed to improve its management of agriculture riparian buffers to meet CZARA requirements. One commenter did not believe the NMFS reports NOAA and EPA cited in the proposed decision document specified that agriculture land use as a reason better riparian buffers were needed to protect coho salmon.

*Source: 15-H, 44-F, 49-G, 55-E, 55-H, 57-SS, 57-XX, 57-YY, 57-ZZ, 71-H, 71-R, 71-W, 71-AI, 71-AJ, 72-A, 78-G, 78-F, 81-A, 83-E, 83-F, 83-L, 84-G, 84-O*

**Response:**

**I. Agriculture Pesticide Management**

*Note: Comments specifically related to pesticides and agriculture are summarized and responded to here. However, NOAA and EPA received general comments on pesticide management as well as specific pesticides related to forestry. Please see Pesticides-General and Forestry-Pesticides for a full discussion of the comments received related to pesticides.*

**Comment:** Commenters expressed concerns with the amount of pesticide application and the lack of management measures in place to address agricultural pesticide use in Oregon. They stated inappropriate pesticide use and controls impacted both human and environmental health. Commenters concluded that Oregon's management measures for pesticides are not adequate to meet water quality standards or support designated uses and additional management measures to address pesticides are needed. Commenters asserted that Oregon needs to improve upon both its application restrictions, providing greater controls on spraying in coastal watersheds, and to improve its protections for all stream classes.

Commenters provided specific examples to support their belief that agriculture pesticide management was inadequate. For example, members of AWQMA local advisory committees relayed that the committees were advised to not even consider pesticides as a pollutant. Therefore, they questioned if the AWQMA Program is sufficient to meet the CZARA 6217(g) management measure requirements. Another commenter referred to an herbicide monitoring study that found that polluted runoff resulted from herbicide applications on agricultural lands, as well as other sources.



In addition, other commenters stated that Oregon does not have sufficient programs in place to monitor pesticide use and impacts. They argued that unknown and unmonitored uses, along with unmonitored health and environmental risks associated with pesticides contribute to the inadequacy of Oregon's program. While another commenter contended that because most risk assessments for pesticides are based on old and incomplete data and endpoint evaluations, pesticide management measures should require re-evaluations of endpoints and health and environment impacts. In addition, they believed that risk assessments should also include testing of inert ingredients found in pesticide products.

One commenter also stated that NOAA and EPA's rationale for agriculture in the proposed decision document does not make any findings about the adequacy of Oregon's program to protect water quality and designated uses from pesticides applied to agricultural lands.

However, not all commenters believed Oregon's agriculture pesticide management program was inadequate. Other commenters stated that Oregon does have appropriate management practices and rules in place. A commenter pointed out that Oregon law already encompasses all 6217(g) requirements for pesticide management. All landowners are required to follow pesticide label requirements under the Federal Insecticide, Fungicide, and Rodenticide Act ("FIFRA") and follow ODA's pesticide rules. These rules, coupled with the state's Pesticide Stewardship Program, CAFO, and AWQMA Programs allow the State to address any agricultural pesticide issues. In addition, a commenter mentioned that the AWQMA Program's site capable vegetation requirement for riparian areas filters pesticides from runoff before they enter waterways. Also, because applying pesticides costs money, farmers have an economic incentive to use them judiciously and keep pesticides where they are applied.

*Source: 28-D, 38-A, 46-H, 54-B, 54-D, 54-G, 54-H, 54-L, 54-M, 54-N, 54-O, 54-P, 54-Q, 54-R, 54-S, 57-GG, 57-HH, 58-G, 59-A, 71-AH, 71-AI, 71-AJ, 71-AK, 72-A, 81-B, 83-A, 83-E, 83-M*

**Response:**

**I. Combined Animal Feeding Operations**

**Comment:** A few commenters expressed concerns with Oregon's track record at regulating livestock practices. They suggested that Oregon does not even have agriculture management measures in place to adequately regulate combined animal feeding operations (CAFOs). One commenter suggested additional agriculture management measures were needed to improve permitting, monitoring, and relocation of CAFOs.

One commenter pointed out that enforcement of CAFO and other livestock management measures is problematic in Oregon. Inadequate enforcement contributes to degraded water quality. For example, commenters referenced many examples of actual water pollution from livestock, including fecal waste from cows floating in waterways. They described instances where complaints against CAFOs have been submitted repeatedly to ODA but they received no response or resolution to their complaints.

On the other hand, other commenters explained that Oregon's existing requirements relating to managing CAFOs are adequate at maintaining water quality and disagreed that additional management measures are needed. They stated that ODA's rules require landowners to evaluate fertilizer efficiency, assess the layout of their farms and storage facilities, locate potential areas where runoff could contact nutrient carrying substances and relocate or avoid placing storage there.

In addition, they stated that CAFOs are subject to state-wide NPDES permits and are therefore exempt from 6217(g). Moreover, they contended that landowners still go beyond what is required in the 6217(g) CAFO management measures by ensuring there is no discharge to water; runoff is stored and covered; and waste and runoff nutrient levels, temperature, amount of time stored, and time and quantity of land application of manure at agronomic rates are measured and monitored.

*Source: 15-F, 15-H, 60-C, 71-Y, 71-Z, 71-AE, 81-B*

**Response:**

**J. Agriculture Grazing Management**

**Comment:** A few commenters provided comments specifically on the adequacy of Oregon's Coastal Nonpoint Program in addressing the 6217(g) grazing management measure. Several commenters believed the 6217(g) management measures, themselves, were flawed and did not provide adequate protection of water quality. They stated that as written, the grazing management measure allows for broad interpretation that can result in the adoption of ineffective grazing management approaches that do not protect or restore riparian vegetation and do not provide stream shading, as they believed was the case in Oregon. For example, they did not believe the 6217(g) management measure requirement to provide salt and water for livestock away from riparian zones was effective. In addition, the commenter criticized the 6217(g) measure for not requiring a halt to grazing in riparian areas during the summer.

However, other commenters supported Oregon's grazing practices. They felt the AWQMA Program is consistent with the 6217(g) grazing management measure and protects stream banks and water sources from grazing activities. They point out that AWQMA rules limit the amount of time livestock have access to waterways. In addition, the rules do not allow agricultural activities, including grazing, to inhibit the growth of site capable of riparian vegetation. If there a violation of this restriction, livestock would need to be removed or managed more appropriately.

*Source: 57-YY, 71-AG, 71-AH, 71-AI*

**Response:**

**K. Need for Additional Management Measures for Agriculture**

**Comment:** Multiple commenters noted that Oregon needed to implement additional management measures for agriculture to meet water quality standards and to protect designated uses. One commenter specifically asserted that the existing agriculture management measures do not protect waterbodies from temperature pollution. They stated that temperature pollution is the most pervasive water quality problem in coastal lowland streams and that elevated temperatures can also impact salmonid productivity. They concluded that it is very likely agriculture activities are contributing to temperature standard violations because for most TMDLs, the allowable temperature increases for nonpoint source pollutants is zero. They stated that none of the AWQMA rules for Oregon coastal watersheds, incorporate additional management measures needed to meet the zero load allocations established in the temperature TMDLs.

Commenters suggested specific additional management measures to protect water quality. For example, to address temperature pollution, several comments reflected that minimum riparian buffer widths need to be established. One commenter stated that published literature suggested that the minimum width should be no less than 100 feet (30 meters) and that greater than 100 foot buffers may be needed in certain areas, such as low gradient meandering channels that are adjacent to designated critical habitat for listed species. Another commenter believed that specific height and density requirements also needed to be established for riparian vegetated buffers.

Other additional management measures that commenters identified included: adopting better pesticide management; fencing streams and riparian areas to reduce impacts by livestock; improving permitting, monitoring and relocation of CAFOs; and adopting regulatory provisions to promote the establishment of riparian vegetation in critical habitat areas and the reintroduction of beaver in suitable locations.

On the other hand, several other commenters asserted that additional management measures for agriculture were not needed. The commenters noted that EPA and NOAA have not provided specific data or information that would support the need for additional management measures. They also noted that CZARA does not require states to implement specific practices, such as specific requirements for agricultural riparian buffers or the restoration of lands to pre-agricultural uses.

In addition, they assert that CZARA does not give NOAA and EPA the authority to place specific additional management measure requirements on a state's program. Rather, they state that the CZARA guidance notes that it is the state's responsibility to identify when, where, and what additional management measures are needed. (See discussion under General-Additional Management Measures for response to this specific comment).

*Source: 15-H, 23-B, 44-C, 44-F, 47-B, 56-M, 57-CC, 57-EE, 57-GG, 57-XX, 60-A, 60-E, 64-E, 66-E, 68-E, 71-E, 71-H, 71-I, 84-I*

#### **K. Economic Achievability of Agriculture Management Measures**

**Comment:** A few commenters emphasized that CZARA requires that all management measures must be "economically achievable" (Section 6217(g)(5)). Therefore they asserted that it would be inconsistent with CZARA to require landowners to implement management measures that are not "economically achievable." They stated that Oregon's AWQMA Program is rooted in implementing economically achievable agriculture practices, consistent with CZARA statutory requirements. On a related note, another commenter also stated that the more voluntary-based approaches, backed by enforceable authorities, Oregon employs to support implementation of its 6217(g) agriculture management measures are more cost-effective because they allow the landowner the flexibility to select the right best management practice for his or her specific site conditions.

*Sources: 64-E, 64-I, 66-E, 66-I, 68-E, 68-I, 71-H, 84-L*

**Response:**

#### **L. Addressing Agriculture Legacy Issues**

**Comment:** A few commenters expressed their concern about legacy agriculture issues, such as where riparian vegetation may have regrown on former agricultural land but is comprised largely of invasive species (i.e., blackberry brambles) and does not provide sufficient protection of stream water quality or create quality habitat. They criticized the AWQMA Program as not doing enough to address legacy issues. They stated that the AWQMA Program does not require active restoration--only removal of current practices that impair restoration. The commenter contended that this creates a gap that must be addressed if Oregon is going to meet its water quality standards. They believed that Oregon needed to adopt additional management measure requirements to address this legacy issue.

Another commenter believed ODA has the authority needed to take action against legacy issues, they did not believe the agency had the political will to do so.

Several other commenters opposed the statement NOAA and EPA made in the proposed decision findings that AWQMA planning and enforcement does not address "legacy" issues created by agriculture activities that are no longer occurring. They stated that neither CZARA nor the 6217(g) guidance define legacy issues or require that state coastal nonpoint programs to address legacy issues. They asserted that nothing within CZARA indicated Congress ever intended for states to consider "legacy" issues through their coastal nonpoint programs.

They stated that even though there is no CZARA requirement to address legacy agriculture issues, Oregon does have a process in place to identify opportunities to enhance and restore watersheds, including address "legacy" agriculture issues. They assert state addresses these issues through the Oregon Plan for Salmon and Watersheds, the Oregon Aquatic Habitat Restoration and Enhancement Guide, the Oregon Watershed Enhancement Board riparian restoration projects, AWQMA plans, and many other federal, public and private partnerships. The still invests money to address these issues. The commenter states these programs are successful due to the voluntary efforts of many Oregon agriculture landowners.

Another group contended that NOAA and EPA contradicted themselves in regard to legacy agriculture issues in the proposed decision document. They noted the federal agencies made a finding that legacy effects were not addressed through existing regulatory tools but then concluded that agriculture plans were a regulatory mechanism to address past actions that are the primary cause of eroding stream banks.

*Source: 15-H, 44-F, 55-I, 57-X, 71-T, 80-I, 84-J, 84-K*

**Response:**

#### **M. Effectiveness of Existing Monitoring and Tracking Programs for Agriculture**

**Comment:** Several commenters expressed their concern with Oregon's existing monitoring and tracking efforts to evaluate the effectiveness of its agriculture programs. They did not believe they were sufficient to understand how well existing management approaches are being implemented, how effective those approaches are at protecting and restoring water quality, and when adaptive approaches are needed. A few commenters did acknowledge that ODA's new strategy for more targeted water

quality monitoring is a step forward, but they also believed a more robust monitoring and tracking program was needed for agriculture. One commenter asserted that a State independent science team found ODA's proposed monitoring plan lacked detail and focus and lacked an understanding of basic monitoring.

Several commenters specifically stated that ODA does not effectively track implementation and effectiveness of AWQMA plans. A commenter suggested that Oregon needed to include an overall compliance strategy to ensure that AWQMA plans and rules are adequately implemented to meet TMDL load allocations and water quality standards. They added that there must be a policy and proactive process to assess AWQMA plan and rule implementation and for taking appropriate enforcement action when violations occur.

Another commenter stated there was a significant gap in the existing science to understand the effectiveness of Oregon's agricultural practices in protecting water quality and designated uses. They noted that the State cannot move forward with stronger agriculture regulations without first having a good understanding of how its existing programs are falling short and what improvements are needed to ensure water quality standards are being met.

On the other hand, other commenters believed the State's existing monitoring and tracking efforts were effective at assessing implementation of agriculture practices. Specifically they noted that biennial reviews of the AWQMA plans, with about 18 reviews done each year, provide a way to track plan implementation. They also highlighted the State's efforts to develop a more formalized evaluation processes through the Strategic Implementation Areas and Focus Areas process to target priority areas and issues. They also stated the State's new Enterprise Monitoring Initiative, which began in 2012, monitors waterways passing through agriculture lands and can be used to inform the effectiveness of the AWQMA program.

In addition, a commenter asserted that most ambient water quality monitoring in the coastal region reported fair to excellent water quality and sites with poor conditions were not due to agriculture activities.

*Source: 46-H, 49-I, 53-E, 53-H, 54-R, 55-G, 55-H, 57-11, 70-B, 70-F, 70-K, 70-L, 71-O, 71-S, 71-Z, 72-A, 73-A, 78-H, 79-I, 80-F, 80-G*

#### **Response I.9**

### **XI. HYDROMODIFICATION**

**Comment:** A couple of commenters discussed the negative impacts of hydromodification, noting the effects of dams on water quality and habitat and impacts from channel modification. They declared that Oregon has failed to control polluted runoff from eroding stream banks and shorelines and it does not have programs in place to protect and restore channel conditions from modification.

*Source: 46-H, 49-F*

**Response:**

## **XII. WETLANDS**

**Comment:** One commenter noted that Oregon does not have programs in place to protect and restore riparian areas needed to maintain cool stream temperatures and habitat or to protect and restore wetlands.

*Source: 49-F*

**Response:**

## **OTHER COMMENTS—NOT RESPONSIVE?**

### **The Public Comment Period**

**Comment:** One commenter questioned why NOAA and EPA requested public comment on their proposed decision. They noted public comment was needed as long as the federal agencies' decision and analysis is based on established criteria and valid science which they believed to be the case.

*Source: 15-B*

**Response:**

### **Importance of Beavers**

**Comment:** One commenter expressed their concern over diminishing beaver because they are being trapped and hunted out. They note that beavers play an important role in maintain natural stream channels, wetlands, and complex floodplains.

*Source: 44-G*

**Response:**

### **Proposed Decision Exceeds NOAA and EPA's Authority**

**Comment:** One commenter noted that the Federal Government places too many regulations on the states, private property owners, and individuals and that NOAA and EPA exceeded the limits defined by the U.S Constitution. The commenter suggested that Congress should remove the budgets for NOAA and EPA and return those funds back to the state.

*Source: 29-A*

**Response:**

**Comment [AC37]:** Combine with comments on need to develop add MMs for beavers? I think NWEA may have made some point along these lines???